AN ASSESSMENT OF SHARED LEADERSHIP AND TEAM PERFORMANCE IN CONSTRUCTION PROJECTS IN NIGERIA

By

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DEPARTMENT OF QUANTITY SURVEYING,
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DECLARATION

I declare that the work in this dissertation entitled "AN ASSESSMENT OF SHARED LEADERHIP AND TEAM PERFORMANCE IN CONSTRUCTION PROJECTS IN NIGERIA" has been performed by me in the Department of Quantity Surveying, Faculty of Environmental Design, Ahmadu Bello University, Zaria.

The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institutions.

Victor Onoja AGADA	_____	_____
Name of Student	Signature	Date

CERTIFICATION

This dissertation entitled "ASSESSMENT OF SHARED LEADERSHIP AND TEAM PERFORMANCE IN CONSTRUCTION PROJECTS IN NIGERIA" by VICTOR ONOJA AGADA meets the regulations governing the award of the degree of Master of Science in Project Management of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

Prof. K. J. Adogbo	_____	_____
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Member, Supervisory Committee	Signature	Date
Prof. K. J. Adogbo	_____	_____
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Prof. S. Z. Abubakar	_____	_____
Dean, School of Postgraduate studies	Signature	Date

DEDICATION

I dedicate this project work first and foremost to God (the source of all things) who has been there for me throughout (from the very inception to the successful completion). Special dedication goes to my parents (Mr and Mrs. Silas Agada), for their relentless prayers and also to the rest of my family members who served as a source of encouragement to me throughout my educational pursuit.

To GOD be the glory!

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ABSTRACT

Recently, the concept of shared leadership has begun to receive a level of prominence, especially in other sectors of the economy. Though, of course, prior researches have since proven that teams with shared leadership structure tend to outperform (by a significant measure) those without it, particularly those with traditional vertical leadership structure. Nonetheless, despite the laudable pros derivable from shared leadership and the embellishes it brings to team performance, the Construction industry is yet to fully appreciate its uniqueness and practically embrace its applicability. To address this issue, this research assessed shared leadership and team performance in construction projects in Nigeria by identifying the various metric used in measuring shared leadership and also that of team performance, assessed the extent to which shared leadership is exhibited in construction project team and determined the most influencing factors. Additionally, the research also determined the influence of shared leadership on team performance using the most influencing factors identified. To achieve the objectives, an analysis based on a systematic literature review was undertaken and a questionnaire-based survey was also carried out in addressing what potential constructs that affect the relationship between shared leadership and team performance. Data were collected from 87 team members who have worked and/or currently working as team member(s) on different construction projects within Nigeria and a statistical analysis was carried out using SPSS software to appraise the extend of influence shared leadership has on team performance. Findings indicated that when there are; effective communication, healthy mental goal orientation, task efficiency and collaborating influence within members, the team's overall performance improves outstandingly. The research only covers the outcomes dimension of team performance, hence, other aspects of team performance such as Input and Processes are open for further studies within construction project teams. Implications and areas for further research were also succinctly discussed.

Key words: Shared Leadership (SL), Team Performance (TP).

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Not until recent years, the concept of shared leadership has begun to receive notable attention (Muller, Sankaran, Drouin, Vaagaasar, Bekker, & Jain, 2018). Prior researches have proven that teams with shared leadership structure tend to outperform those with a traditional vertical leadership structure. Subsequently, early (ancient) leadership scholars have argued for the importance of leadership being shared among team members in a self-managed team (Gibb, 1954; Katz & Kahn, 1978, Carson & Tesluk, 2016). As emphasized by Carson Tesluk (2016), Leadership is probably best conceived as a work team quality, as a set of functions which must be carried out by the team. Katz and Kahn (1978) also in a laudable suggestion opined that when team members voluntarily and spontaneously offer their influence to others in support of shared goals, shared leadership can provide organizations with competitive advantage through greater levels of commitment, more personal and organizational resources brought to bear on complex tasks, more openness to reciprocal influence from others, and greater sharing of information.

Several trends in team design, use, and structure, however, point to the importance of internal team shared leadership. First, the complexity and ambiguity that teams often experience make it unlikely that a single appointed leader (team leader) can successfully perform all necessary leadership functions (Day, Gronn & Salas, 2004). Second, current forms of teamwork that emphasize knowledge-based work rely on employees who have

high levels of expertise and seek autonomy in how they apply their knowledge and skills, therefore desiring greater opportunity to shape (DeNisi, Hitt, & Jackson, 2003). Further, organizational structures and the universal presence of self-managing teams, which are now well established and deeply rooted in some industries (Manz & Sims, 1987 & Lawler, Mohrman, & Benson, 2001), emphasize the need for leadership originating from within the team as opposed to a single individual in a position of hierarchy. Despite this transition in leadership responsibilities from formal managers to team members, relatively little research has addressed the implications of this evolutionary shift to internally distributed forms of team leadership. As organizations struggle to adapt to increasingly dynamic and complex environments, significant transformations are taking place in the way in which work is performed (Pfeffer, 1994; Thurow, 1999). One of the primary facets of this change is an increasing reliance on work teams. Indeed, more than 70 percent of large organizations have set up some form of self-managed work team (Lawler, 2000; Hiller, 2002). The rationale for this shift is that groups of people working together can accomplish something beyond the capabilities of individuals working alone (Marks, Mathieu, & Zaccaro, 2001).

From a strategic perspective, teams can create and maintain social capital as a meta-resource, which in turn has the ability to sustain competitive advantage (Wernerfelt, 1984; Barney, 1991). Yet it has also been observed that teams often do not fully meet the performance demands placed on them (Hackman, 1987). Some of the factors differentiating effective from ineffective teams include effective communication, trust, (Edmondson, 1999), cross training and coordination (Marks, Sabella, Burke, & Zaccaro, 2002), pay systems (Lawler, 2000), and member composition (Barrick, Stewart, Neubert,

& Mount, 1998). In today's growing and innovative environment, work teams have emerged as rather the most dominant organisational form used to respond to rapid market changes and foster innovation**.** The emergent of innovative perspective that viewed leadership as an (intentional) influencing process in organisation have been succinctly witnessed in recent years (Sun, *et al.*, 2016). Most recently, organisations have been seen to have moved away from traditional thinking that prioritized a limited top-down command structure of leadership and restricted the role of non-management staff in leadership functions and decision making (Mintzberg, 1983; Pearce, 2005). In contrast, shared leadership is lauded to have significant and beneficial implications for team and organizational processes. It creates efficiency in the use of expertise and also increases the effectiveness of leadership within the team by distributing elements of the leadership role to the individuals best suited to take them on (Friedrich, 2005). An increasing amount of attention is now devoted to examining how informal leadership functions of team members contribute to team effectiveness (Pearce & Manz, 2005; Friedrich, 2009; Pearce, 2002, Ensley, 2006; Carson, 2007; Drescher, 2014).

Existing studies on shared leadership fall into the following categories: Transition of Leadership between project manager and one or more team members (Muller, Zhu, Sun, Wang, and Yu, 2017), studies of developing a framework for understanding the interaction between person-centered leadership and team-centered leadership by individuals in the project team (Sankaran, Muller, Drouin, Vaagaasar, Bekker and Jain 2017), studies on moderating factors and aspects to be considered in assembling teams for shared leadership in order to facilitate team effectiveness (Martin, Cormican, Sampaio and Wu, 2018). These studies as a whole (although done in different sectors of the

economy and also different parts of the world) show and contribute to the understanding of the concept of leadership and the interaction between one or two members of a given project team. A commonly held view is that, members of a project team do not need direct leadership or initiating structure (Katzenbach and Smith 1993). Also, that the effectiveness of self-managed team depends on some factors which can significantly influence how well the team performs (Robbins 2005). Therefore, in order to successfully ascertain the performance of a self-managed team, it is imperative to critically examine shared leadership and possibly all factors (metrics) that make for its existence in a project team and also, what makes for team performance.

1.2 Statement of Research Problem

The understanding of the fact that, Shared Leadership (SL) is considered crucial for enabling team performance and effectiveness is imperative (Martin & Cormican, 2018; Sampaioa & Wu, 2018; Carson & Tesluk, 2016; Muller, et al., 2018), and some researchers have even succinctly argued that it is in fact the most critical ingredient (Sinclair, 1992; Zaccaro, Rittman, & Marks, 2001; Sun, *et al.*, 2016). However, most existing research on shared leadership have focused narrowly on individual team leader's influence (usually a manager external to the team) while largely neglecting leadership provided by team members within a given project team (Stewart & Manz, 1995; Kozlowski & Bell, 2003; Federick, *et al.*, 2011; Adelere, 2011; Roosmalen, 2012).

In this vein, despite the laudable researches done on shared leadership and how it positively impacts team performance (in other sectors), the construction industry is yet to fully harness such practice in its full extent due to lack of knowledge of it amongst other reasons. Hence this study seeks to carry out a detailed investigation in this regard.

1.3 Aim and Objectives

The aim of this research is to appraise Shared Leadership and Team Performance in Construction projects;

The above aim was achieved through the following objectives;

1. Examine the perception of shared leadership and its impact on team performance.
2. Identify the various metric of measuring shared leadership and also team performance.
3. Assess the extent to which shared leadership is exhibited in construction project team and determine the most influencing factors
4. Determine the influence of shared leadership using the most influencing factors on the overall team performance.

1.4 Scope and Limitations

The focus of this study is to appraise Shared Leadership and Team Performance in Construction projects. The data for the study were obtained from team members namely: Architects, Builders, Engineers, Project managers and Quantity surveyors within Kaduna, Nigeria. Professionals who have participated in teams in any construction works, be it public or privately-owned projects. The emphasis was not so much on the currency of the project as it was on individual team member's understanding of the shared leadership carried out within their team and how it affected their team's performance. Other stakeholders in the industry such as contractors, clients, suppliers, manufacturers etc. were not included in this study. The study only covered the most influencing metrics in shared leadership and that of team performance from the list identified (based on the responses obtained).

Limitations

Limitations relate to the weaknesses of a study and are outside the researcher's control (Leedy & Ormrod, 2010). The following are the limitations from the study:

i. This study assessed the construction project teams (members). Hence, it did not provide any research implications of construction project teams in any other industries.

ii. This study only employed the use of quantitative approach for the collection of data by means of gaging the influence of Shared Leadership on Team Performance and did not encompass a qualitative approach to provide deep insights about such influence.

iii. Structured questionnaires were used to collect data from respondents. Hence, this study did not provide insights about the perceptions of team members towards their responses due to lack of open-ended questions.

1.5 Research Method

To achieve the objectives set forth by the study, a systematic literature review was carried out. The aim of this approach is to identify and analyze the smallest possible publication set that meet the criteria while a quantitative approach using a questionnaires was employed to collect data from a number of project teams on on-going projects. These is a more feasible way to reach a large number of reviewers to ensure authentic and reliable results. The target population comprises of project management teams within the construction partictioners. Data analysis was done with the aid of Statistical Package for Social Scienecs (SPSS) using Kendall Tau-b Corelation Analysis.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Several components of shared leadership and team performance were aptly expatiated in this chapter. The origin, meaning and significance of shared leadership and various of its concept were discussed. A brief and general review of literatures concerning several key theories of leadership, practices and models were also elucidated. A closer look at the merits and shortcomings of the several styles of leadership and their effectiveness in the construction industry is considered.

The chapter further highlights the factors that will influence the choice of leadership styles or behaviours in situations. An insight of the reason these leadership behaviours are likely to have a beneficial effect on individual and team behaviour is given. An evaluation of leadership behaviours and their potential in the context of a particular leadership model in construction-oriented organisations working practices are listed. A glance of exemplary leaders in the construction industry who are aware that if they like to get commitment and achieve great standards, they must be models of the behaviour they expect of others. It all starts with leaders who effectively model the way. Leaders set tone through their routine actions that show they are committed to their visions. Exemplary leaders explain values and set the example by aligning their behaviours with common values.

2.1 Leadership Overview

The study of leadership is dated back to the early of civilization. Religious Leaders, Egyptian kings and Greek heroes all have (leadership) in common (Stone, Russell, & Patterson, 2004). Other scholars defined leadership as a process whereby a single person influences team contributors toward the realisation of organisational objectives (Yulk, 2010). Leadership includes: vision about objective, upholding principles, motivating, managing, accomplishing a practical degree of cohesion, explaining, serving as a role model, representing the group externally, renewing.

Leadership according to (Khan, Bhat & Hussanie, 2017) is, "the process of influencing others to accomplish group or organizational goals" with the traits of Intelligence, Drive, Integrity, Honesty, Knowledge of the business, Emotional stability, Cognitive ability, Desire to lead and Self-confidence. "Strong leadership is indispensable for an organization. Leaders create the vision, support the strategies, and are the catalysts for enhancing the individual bench strength to take the organization forward.

Approaches to leadership research in the past half century have commonly focused on examining the interaction between situational factors and either (1) the traits of effective leaders, or (2) distinguishable leadership behaviors (Surji 2015). According to Surji (2015) traits of leadership refer to leader competencies that are necessary for an individual to emerge and function as a successful leader. These competencies include cognitive, social, emotional, biophysical, and character traits. Much of the existing research has focused on these competencies.

Philosophy of leadership

The guiding philosophy of a leader is assumed to be a determinant to how a leader treats its subordinates (Hoggets & Luthans 2000). They are two philosophic assumptions with the term "Theory X" and "Theory Y".

Theory X

It states that some managers believe that people are basically lazy and coercion and threat of punishment often are necessary to get them to work.

Theory Y

It states that some managers believe that under right conditions people not only will work hard but will seek increased responsibility and challenge.

2.2 Leadership behavior and styles

Leadership behaviors according to (Hoggets & Luthans 2000:403) have been categorized into 3 Distinctive types

i. Authoritarian leadership
ii. Paternalistic leadership
iii. Participative leadership

i. Authoritarian leadership

This is a category of leader that uses work-centered behavior designed to ensure task accomplishment. It utilized a one-way communication from leader to subordinates. It is also widely used by theory X managers (Hoggets & Luthans 2000).

ii. Paternalistic leadership

This category of leadership uses work-centered behavior coupled with a protective employee-centered concern. Paternalistic leaders are referred to as soft theory X leaders because of their emphasis on employee control and concern for their welfare.

iii. Participative leadership

This type of leadership use both works centered and people-oriented approach. Participative leaders typically mentor and encourage their people to play active role in assuming control of their work and authority is highly decentralized. The above listed are the traditional form of leadership behavior in organization prior to the emergence of self-managing teams. But participative leadership style presents a better reason for sharing leadership among people as a new concept (Wright, 1996).

2.2.4 Function of a good leader

In order for leadership to be effective it must performs some basic function. These functions as identified by (Adair 2006) include the under- listed. He categorized the functions of leadership based on the context of team, task, and individual in a team.

a) Planning
b) Initiating
c) Controlling
d) Supporting
e) Informing
f) Evaluating

a. Planning

A good leadership seeks all available information to defined group task, purpose, or goal. It also put a workable plan across to member for as a frame-work (Adair 2006). Leadership must be able to set a direction on methods to achieve team purpose. This will ensure that team members are guided and help to achieve tasks at hand.

b. Initiating

It also gives task to group member and explain standard on which task will be based and why such standard will be suitable to perform a given task.

c. Controlling

Leadership is also saddled with the responsibility of maintaining standards among the group member and also influences the tempo to ensure that all actions are taken towards objectives.

d. Supporting

Leader must also express fairness and accept all members and their contribution in a team. It must also encourage group and individual to foster team spirit. It means that as a leader active listening skill is highly important in order to be able to understand the light of members to be able to adequately give them support when needed.

e. Informing

Leadership must clarify task and plan to team members. Exchange of information with the group must be coherent and must be mutual. Effective communication usually facilitates the healthy co-existence within a team therefore message and information must be passed across at the right time using the right medium.

f. Evaluating

Finally, a leader must also ensure feasibility of an idea, consequences of proposed solution and also evaluate group performance against standard actions taken towards objectives.

g. Supporting

Leader must also express fairness and accept all members and their contribution in a team. It must also encourage group and individual to foster team spirit. It means that as a leader active listening skill is highly important in order to be able to understand the light of members to be able to adequately give them support when needed.

h. Informing

Leadership must clarify task and plan to team members. Exchange of information with the group must be coherent and must be mutual. Effective communication usually facilitates the healthy co-existence within a team therefore message and information must be passed across at the right time using the right medium.

i. Evaluating

Finally, a leader must also ensure feasibility of an idea, consequences of proposed solution and also evaluate group performance against standards (Adair, 2006). Therefore, individuals in teams must be able to possess one of more of the characteristic functions of a good leader in order to have an effective sharing of leadership.

2.4 Leadership Thoughts

The following are seven leadership thoughts (Lee & King, 2001), this list is by no means exhaustive.

i. The Genetic Thought: Some people are born with leadership qualities and some people without. Only specific people can learn to lead efficiently; they are naturals. Nothing can be done to those who are born without leadership qualities.

ii. The Learned Thought: When one study and practise leadership, one can learn to become an effective leader, irrespective of who they are. This is in contrast with genetic view, it is applicable in the military and among leadership development professionals.

iii. The Heroic Thought: The only successful leaders are the ones who make audacious, intelligent and compassionate decisions that others cannot. The opinion is that such leaders are those who bring others of us out of trouble.

iv. The Top-Only Thought: Leadership only ensues at the top of an organisation. Everybody takes orders. Provided you are not the leader, you are irrelevant. When you are a leader, then you are all everybody could wish. Being the leader is the ultimate goal.

v. The Social Script Thought: You will be needed to be a leader, when is your turn and when asked, you must agree and be thankful. This technique is found in professional associations and civic organisations.

vi. The Position Thought: When you are in the job and have the title, you are a leader. This notion is classical in hierarchical and highly structured organisations and takes some validity even in the most effective structures.

vii. The Calling Thought: Even though not essentially a religious practise, a call to lead can be quite convincing. This theory proposes that leaders have a sense of mission.

Leadership is a collection of traits, qualities and behaviours acquired by the leader that support the contribution, development, and commitment of people in the organisation (Bolden & Gosling, 2006). In addition to interpersonal skills, it is the expectation of leaders to show exceptional information processing, project management, customer service and delivery skills, as well as established business and political judgement. They form partnerships, show unbelievable energy and passion, and get things done.

2.5 The Difference between Leadership and Management

Leadership is still a very discussed and challenged theory. It is a term that is used in several ways and senses sometimes as a noun, denoting the leader and sometimes as a verb, indicating the process of leading (Ciulla, 2005). In the same vein (Watson, 2002) demonstrates that the use of the word management is interchangeably meaning a function (management), activity (managing) or an individual (manager), the same occurs with the word leadership.

With respect to its distinction from management, leadership as understood from the new standpoint (Bryman, 1992) is vision-driven, bring about change based on ethics, ideals, vision, symbols, and emotional transaction. Management is achievement-driven, bring about steadiness based on prudence, bureaucratic system, and the achievement of contractual duties. While others view leaders and managers as separate kinds of entities (Zaleznik, 1989), others argued that effective leadership needs effective management, that leadership and management complement each other, that leadership is much more

than management, and that leadership is required for results that surpass targets (Bass, 1985, 1998).

Possibly an evidence to this misperception can be found if the etymology of the term is partially understood. The origin of the term leadership can be traced back to the term lead, came into the English language around 800 AD from the old Anglo-Saxon word for to travel, and then adapted, around four centuries later, meaning (to guide) (Grace, 2003). The term leader originated approximately 1300 AD in respect of the part played by statesmen and politicians, but was not used in organisations until the beginning of 19th century, about the same time that the term leadership started to be applied to define the action performed leaders. Therefore, it appears that from the history leadership has been the concern of people of Anglo-Saxon origin (Bass, 1990), and is mainly a 20th Century approach that is linked to the democratisation of Western Civilization (Rost, 1991) cited in (Grace, 2003). This application is more necessary to assist Americans discover meaning in their quest for the significance of life (Rost, 1991) cited in (Grace, 2003). Each type of social relations is like a game in which individuals take roles. Individuals can be more or less strongly engaged in a specific role. Achievement is possible to arise when individuals are completely involved in a role (Goffman, 1961).

Leadership directly dealt with people. However, leadership includes actions and decisions regarding all kinds of other things, but leadership is exceptional to any other role because it has unique concern for people. Several abilities in life are a matter of gaining competency and then using them in a right manner. Effective leadership requires emotional abilities and behavioural attributes, which can draw intensely on psychological and spiritual capabilities of a leader. The leadership role is an unavoidable reflection of

the demands and challenges of people in the present world. Leadership is thus a philosophical approach, with increasingly intricate outcomes, motivated by an increasingly intricate and dynamic environment.

According to Kotter (1990), managers must learn how to lead and manage. However, there are several debate about the application of the two terms, management is the term employed to describe planning, organising, staffing, directing and controlling the organisational activities to achieve specific objectives. Though, leadership is a process of influencing people, through the capacity to influence the perception, attitudes and behaviour of people. The key idea of contrasting between leadership and management is to demonstrate that followers are eager agree with the demands of their leaders without applying any form of expert or referent power. On the flip side, managers rely on formal power to get their subordinate to perform their tasks (Kotter, 1990).

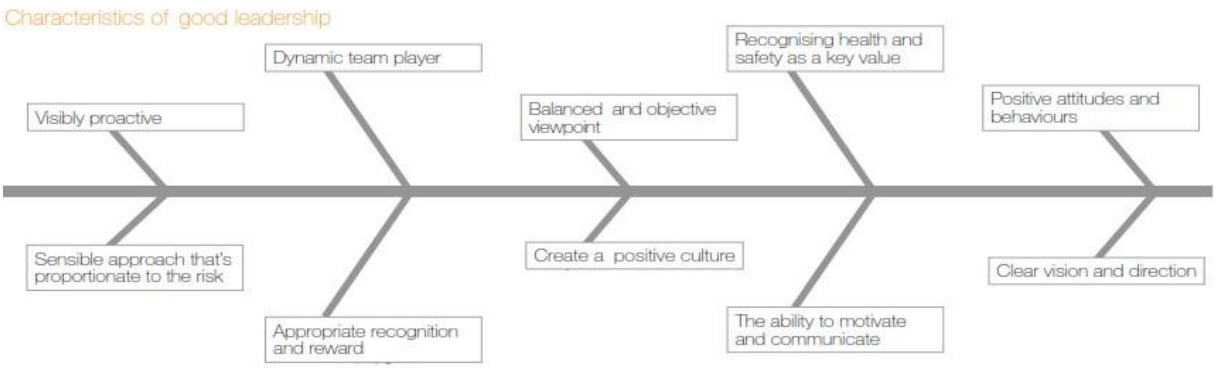

Figure 2.3: Characteristics of good leadership

Source: (CIC, 2012)

2.5 Effectiveness of Leadership in Developing Leaders with Character and Skill

During the three decades that (Wilson Learning, 2006) has studied leadership, and has assisted its clients establish their techniques to leadership success; apparently, it is how

leaders assess their direction which will set the tone for the performance of their organisation. According to Wilson Learning, the vision of a leader is to employ people in delivering their entire energy to the generation of value and success. Wilson Learning's method to assessing and developing leaders starts with leadership character those components of leadership that are enduring and fundamental to how people perceive the purpose of leadership. While leadership character is the basis of effective leadership, alone it is not enough. In order to create concrete outcomes, effective leaders require the competency necessary to perform those values and principles.

With respect to both academics and practice, the skills necessary to achieve effective leadership are four fundamental roles that every leader must achieve, identified as: the visionary, the strategist, the facilitator, and the contributor (Wilson Learning, 2006).

All leaders, irrespective of level, require to achieve all four roles. Though, they do not need to apply all four roles at the same level and to the same degree. The importance of every role will differ, depending on the level of the leader. Wilson Learning recognised three key levels: performance leader, development leader, and strategic leader. There are seventy five main dimensions of worker satisfaction (Lamb & McKee, 2004). Yet, the two most significant solutions to effective leadership based on a research conducted by the (Hay Group, 2011), an International management consultancy, were trust and confidence in top leadership, which are the most reliable predictors of employee satisfaction in an organisation. Besides, effective communication by leadership in three main areas was the key to winning organisational trust and confidence:

i. Assisting employees to recognise the entire business strategy of the organisation.

ii. Assisting employees recognise how they contribute to accomplishing main business objectives.

iii. Disseminating information to employees on how the organisation is performing and how an employee's own division is doing relative to tactical business objectives.

2.6 Leadership Competencies

Generally, leadership competencies comprise (Wellington & Foster, 2009);

i. Basic attributes important criteria: minimum of one year‘s experience, one or more good degrees, superior intelligence, evidence of high performance against the organisation‘s leadership competencies and at least one excellent appraisal with their current employer, highly motivated, good spoken and written language, mobile worldwide (including mobility between countries as business needs arise).

ii. Basic attributes necessary criteria: ideally fluency in one or more languages, some international experience (work/study/travel), worked in any function (experience of more than one is an advantage).

iii. Leadership competence displays the following:

   a. Strategic vision: takes an interest in the business‘s strategy and the wider industry context, thinks beyond daily tasks, interested in emerging technology and consumer trends.

   b. Values communication: sets a good example, understands how the values apply to daily work, if they have direct reports, seen as a credible team leader, good listening skills

c. Commercial drive: high energy, committed to achieving results, reasonably knowledgeable about specific business sector.

d. Building organisational capability: may have had some involvement in recruitment, organises work team effectively, uses formal processes and informal networks and gets things done.

e. Customer commitment: front-line focused, knowledgeable about customers (internal and external), works hard to satisfy both internal and external customers.

f. International team leadership: some understanding of the international dimension of the business, will probably have worked, studied or travelled in different countries, empathetic to other cultures, aptitude for working well with others.

2.7 Facilitators of Leadership

Not all learners are effective leaders but all leaders are passionate learners (Brooks & Normore, 2010). Leaders learn, practise, reflect and improve as a continuous cycle in their entire career, with deliberate self-consciousness. At the same time, leaders are categorised through their ability to lead the learning of people. Jack Welch famously said that he spent almost half of his time developing the next cohort of leaders (Collins, 2005). Though, it is a main attribute of leaders that they reflect how to gauge what they do, how to form organisational capacity and thus, how can they lead the learning of people. This is the coaching component of leadership. Good communication is also seen as a vital leadership skill. A leader has to be in command, visionary and proactively foresighted.

This makes a true leader. To be able to translate vision into goals and to communicate effectively to people marks a trait of an effective leader.

The important behaviours of leadership integrity is being authentic, being trustworthy, and being compelling stand on the shoulders of the personality traits that encourage each of them: courage, integrity, and commitment, respectively (Hamm, 2011).

Figure 2.5: A Matter of Character, Skill and Values

Source: (Hamm, 2011)

Additional facilitator seen in leaders nowadays is emotional intelligence. Intelligent Quotient (IQ) and technical skills are vital; but emotional intelligence is absolutely indispensable in leadership (Goleman, 1998).

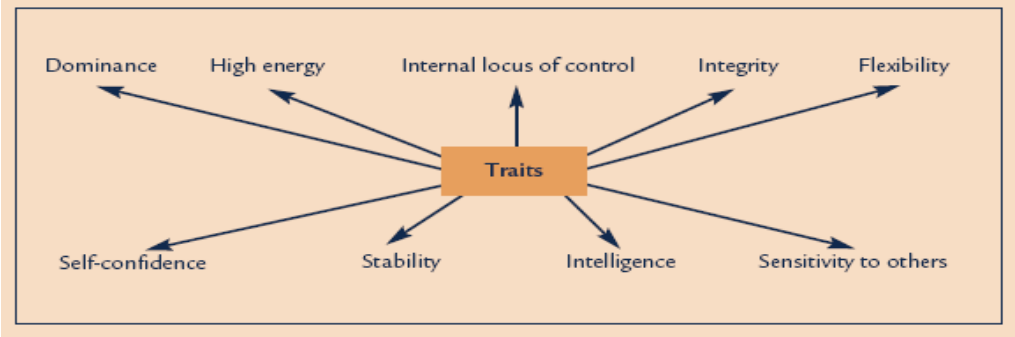

Figure 2.6 Traits of Effective Leaders

Source: (Lussier & Achua, 2010)

2.8 Leadership in Construction Projects

Successful completion of every project needs a good directive and leadership. In construction project, the project managers play a big part in the entire management of the projects. There are thirteen leadership behaviours required to influence individuals, which have been recognised from literature:

i. Visioning: The leader expresses the vision and assists the team to clarify its goals (Katzenbach & Smith, 2003; Boehnke, DiStefano, DiStefano, & Bontis, 1999).

ii. Inspiring: This behaviour is generally shown through communicating high expectations, applying symbols to concentrate efforts, and communicate important purposes in simple ways (Humphreys, 2003; Boehnke et al., 1999).

iii. Stimulating: The leader assists followers to look at old problems in new ways. Intelligence and rationality are applied to solve problems (Humphreys, 2003; Boehnke et al., 1999).

iv. Coaching: The leader gives close consideration to individual abilities among followers; and he/she mentor and advises people with individual, personal attention (Humphreys, 2003).

v. Rewarding: The leader offers rewards and positive comment to followers who comply with the agreed goals (Humphreys, 2003; Boehnke et al., 1999).

vi. Punishing: This style is characterised by providing punishment and negative comment to followers who display unwanted and poor performance (Daft, 2003).

vii. Delegating: The whole notion of delegation is to shift power and responsibility to subordinate positions in the organisational pyramid (Daft, 2003) and to create

challenging and complex tasks to subordinates to boost their development (Boehnke et al., 1999).

viii. Leading by example: The leader performs the same actual work and acts in the same way as subordinates (Katzenbach & Smith, 2003; Littrell, 2002; Zimmerer & Yasin, 1998).

ix. Sharing and open communication: The leader disseminate every kind of information in the entire organisation, across functional and hierarchical levels (Daft, 2003).

x. Listening: The leader holds both facts and feelings to interpret a true meaning of message, and transfers views to understanding with others (Daft, 2003;Cacioppe, 1997).

xi. Directing: The leader commands followers on precisely what they are supposed to do. The leader sets the goals, standards, rules, and regulations (Daft, 2003; Littrell, 2002).

xii. Participating: The leader meets with the followers before making decisions. Views, comments, and contribution are welcomed in the decision making process (Daft, 2003; Katzenbach & Smith, 2003; Littrell, 2002).

xiii. Proactive: The leader dynamically collect information from followers and proactively identifies problems before they occur (Daft, 2003).

2.8.1 Appropriate Leadership Styles for Construction

After an exhaustive review of literature on leadership, (Higgs, 2003) highlighted six main schools of leadership namely: trait school, behavioural school, contingency school, visionary school, emotional intelligence school, and competency school. (Rees, Turner,

& Tampoe, 1996) highlighted six traits of effective project manager, and stated that effective manager is generally of above average intelligence and have good problem solving skills. Such traits are identical to intellectual competencies (IQ) that (Dulewicz & Higgs, 2005) referred to as aspect of leadership competencies. Other traits highlighted by (Rees et al., 1996) are behavioural or motivational, such as energy, and skills oriented traits like communication. However, they do not give proof that these traits helps directly to improve project performance. Among leadership styles, situational leaders concentrate on several tasks and relationship behaviours (Blanchard & Hersey, 1996), and transformational leaders motivate followers, meet their developmental requirements, and support new techniques and extra effort toward problem solving (Seltzer & Bass, 1990). One may argue that the transactional leadership style, which is depended on an exchange of reward for work, is more appropriate to organisational processes, while transformational leadership is suitable when one is concerned with relations.

2.4 Introduction to Shared leadership

Sharing leadership isn't an entirely new concept. It is rather a scarcely known and acknowledged one. It is a concept in several self-managing teams. Roles and functions are shared among members to facilitate results. In sharing leadership many factors are very essential in order to have an optimal performance that will produce target goals and objectives.

Shared leadership arises from traditional leadership theories that have focused on leaders' descending persuade on their followers (Pearce & Conger, 2003), and this could have an effect on how shared leadership is observed (D'Innocenzo et al., 2016). Shared leadership can be defined as an occurrence generated from team member dependence and

inspiration to achieve shared team goals (Carson, Tesluk & Marrone, 2007; Chiu et al., 2016). Barnett and Weidenfeller (2016) suggest that shared leadership can be defined as important and useful, albeit complex and sophisticated. D'Innocenzo et al. (2016) argue that the complexity of tasks within the team related negatively to the shared leadership and team performance relationship, yet Pearce and Manz (2005) found the opposite. Both Boies et al. (2010) and D'Innocenzo et al. (2016) found that shared leadership, through transformational leadership, had a negative effect on team performance.

They also suggested that shared leadership enhances the valuable outcomes of improved team performance, effectiveness, innovation and learning. Furthermore, they stated that shared leadership is exclusive and separate from vertical leadership, and team performance can be improved past what actual vertical leadership can achieve (Barnett & Weidenfeller, 2016). D'Innocenzo *et al*. (2016) define shared leadership through five significant themes: origin of leadership (which is both internal or external), convention of leadership (which is the formalisation within the organisation), distribution (which is the extent of team member participation), temporal dynamics (which is both static or non-static), and the numerous roles (which is the various roles and functions of the leader). A significantly confident relationship between shared leadership and team performance was measured, supporting the claim made by D'Innocenzo et al. (2016) of affirmative value. However, they found that the scale of this relationship fluctuated across their study.

This dynamic process called shared leadership is proving to be particularly effective in the increased complexity of organisation efficiencies; where a single, vertical or traditional leader is unable to perform the many roles optimally (Grille & Kauffeld, 2015; Small & Rentsch, 2011). The idea of multiple leaders dates back to the early 1900s where

an individual's knowledge for the situation at hand was sought after, and not necessarily the leader's expertise only (D'Innocenzo et al., 2016). Barnett and Weidenfeller (2016) and Pearce and Conger (2003) suggest that shared leadership is constructed on team decision-making, social exchange theory, self-leadership, self-managed teams, enablement and shared knowledge over the past four decades. Shared leadership has gained significant traction in recent years, and is potentially starkly opposite to traditional leadership (Pearce, Manz & Sims, 2009). This has led to recently published meta-analyses that measures the efficacy of shared leadership and its impact on team performance (Barnett & Weidenfeller, 2016). The one person in charge, who is expected to know everything, is being exchanged by a knowledgeable team (Chiu et al., 2016).

Evolution of Shared Leadership

In 1978 Kerr and Jermier proposed a theory about leadership in organization and argue that there is less need for leadership figure in organization. This was based on two premised points that leadership also requires guidance and responses to the actions of the leader by the followers to signify satisfaction. It was therefore stated further that such guidance does not necessarily have to be provided by the any other higher authority. This therefore involved series of research, which were carried out, bring about the need for substitute for leadership. The conclusion was that the ability, experience and knowledge are highly required to have a good substitute for leadership within an organizational context. Subsequently the need for substitute form of leadership brings about the need for self-management that account for the existence of self-managing team that are common practice today (Wright 1996).

2.9 Definition of Shared Leadership

Gibb (1954) first suggested the idea of two forms of team leadership: distributed and focused. Focused leadership occurs when leadership resides within a single individual, whereas distributed leadership occurs when two or more individuals share the roles, responsibilities, and functions of leadership. Rather than rigid either-or categories, Gronn (2002) argued that these two concepts of focused and distributed leadership be considered endpoints on a continuum.

To further develop the concept of how leadership is shared among team members, we utilize Yukl's (1989) definition of leadership as "influence processes involving determination of the group's or organization's objectives, motivating task behavior in pursuit of these objectives, and influencing group maintenance and culture." Building on the concept of leadership as influence and drawing on multilevel theory (Kozlowski & Klein, 2000; Morgeson & Hofmann, 1999), we define shared leadership as an emergent team property that results from the distribution of leadership influence across multiple team members. Consistent with the notion of collective constructs (Morgeson & Hofmann, 1999), we argue that shared leadership originates with individual team members engaging in activities that influence the team and other team members in areas related to direction, motivation, and support (Yukl, 1989) and through the series of interactions that team members have with each other involving the negotiation and sharing of leadership responsibilities. The resulting collective structure can be considered to be a leadership network that influences and shapes both team and individual activities and outcomes.

Leadership can be conceptualized in relation to either the strength (i.e., quality or effectiveness of influence provided) or the source of influence (i.e., single vs. multiple team members providing influence.) Our definition is focused on multiple sources of influence, and refers to widespread influence within teams rather than to specific leadership behaviors, formal positions, specific types of influence, or the effectiveness of the leadership that is exhibited by these sources. Building on these ideas of distributed influence and drawing upon Gibb's (1954) original conceptualization, we believe shared leadership can be conceptualized along a continuum based on the number of leadership sources (i.e., team members) garnering a high degree of influence within the team. Anchoring the low end of the continuum are cases where team members follow the leadership of a single individual. Although the nature of leadership exhibited by this single individual might be quite strong, leadership here originates from only a single source. In contrast, at the high end of the shared leadership continuum are teams where most, if not all, team members provide influence to one another. Here, the source of leadership influence is distributed among team members rather than concentrated or focused in a single individual. In these teams, team members both lead and follow one another, such that at a given point in time members are both providing leadership for certain aspects of team functioning and also responding to the leadership provided by others on the team in different areas. Teams with high levels of shared leadership may also shift and/or rotate leadership across time, such that different members provide leadership at different points in the team's lifecycle and development.

Shared leadership is a relational phenomenon involving mutual influence between team members as they work toward the pursuit of team objectives, and social network theory

provides a natural theoretical and analytical approach to studying the relational influence structure in teams (Mehra et al., 2006). The exercise of leadership influence (Yukl, 1989) occurs in the context of team member relationships, and assumes the existence of followers or "influences" (Bedeian & Hunt, 2006). Shared leadership creates patterns of reciprocal influence which further develop and reinforce existing relationships among team members. Thus, social network theory is appropriate as it examines patterns of relationships among individuals such as advice, information, and friendship networks, and emphasizes the relationship as the unit of analysis (Brass, 1995; Sparrowe, Liden, Wayne, & Kraimer, 2001). Further, social network analysis allows for the study of multiple sources of leadership influence, and the ability to model patterns of influence within the team and preserve rich data about the actual distribution of influence (Mehra et al., 2006).

Consistent with social network theory, we argue that the pattern of emerging mutual influence in teams can be conceptualized as an increase in the density of the team's internal leadership network. A leadership network is the pattern of individuals who rely on others for leadership of the team, and density increases as this reliance on one another for leadership grows. Density, as used conceptually in social network research, is a structural property representing the pattern of relationships within teams, and describes the overall level of different types of exchanges among members of a given social network (Sparrowe et al., 2001). Sparrowe and colleagues (2001: 317) describe this team level construct as follows: "Density is analogous to the mean number of ties per group member. The more ties each group member enjoys with the other group members, the greater the density of the network." Here, ties between team members (also referred to as

relationships) exist when a team member perceives another as exerting leadership influence within the team. Thus, the density of a leadership network is the mean number of relationships (per team member) involving leadership influence. When more team members provide leadership to their peers, density of this type of network increases. Operationally, network density is a measure of the proportion of total possible relationships (actual versus potential) that exists in a given network (Wasserman & Faust, 1994), and thus captures variance in the overall patterns of relationships rather than variance in shared perceptions of a construct (as is the case with aggregated behavioral scales). Accordingly, utilizing network density as a measure of shared leadership appropriately reflects the extent to which leadership influence is distributed among a relatively high or relatively low proportion of its team members.

2.10 Relationship with Similar Constructs

Having defined and described the nature of shared leadership, it is also helpful to describe briefly its relationship to other similar constructs, such as autonomous or self-managing teams, team empowerment, cooperation, team cognition (e.g., transactive memory systems and team mental models), and emergent leadership. Self-managing and autonomous teams describe particular types of team designs whereby team members have greater degrees of responsibility for setting their own goals, monitoring their own progress, and making their own decisions than do team members in manager-led teams (Hackman, 1987). Although self-managing team designs may promote the development of shared leadership through increased self-management (Manz & Sims, 1987), or through heightened levels of trust or autonomy (Langfred, 2004), such designs themselves do not necessarily result in leadershipinfluence being widely distributed

within the team as other factors such as the internal team environment and external coaching may also influence shared leadership (Wageman, 2001).

Team empowerment is a motivational construct and has been defined as the collective experience of heightened levels of task motivation due to team members' assessments of their team's tasks as providing them with high levels of meaningfulness, autonomy, sense of impact, and potency (Kirkman & Rosen, 1997). From a temporally dynamic perspective, team empowerment can be viewed as an emergent state that both precedes and follows team processes depending on the stage of a team's development and performance cycle (cf., Marks, Mathieu, & Zaccaro, 2001). From this perspective, team empowerment might facilitate the development of shared leadership by motivating team members to exercise influence. Conversely, shared leadership might also lead to greater team empowerment by providing members with a heightened sense of meaningfulness, autonomy, impact, and potency, depending on the stage of a team's development. However, a team may experience a high level of empowerment yet still have a strong external leader providing most of the leadership influence for the team, with very little shared leadership exhibited by team members.

Shared leadership is related to but distinct from other team processes such as cooperation or helping, which refer to working with and/or assisting other team members with their tasks (Kozlowski & Bell, 2003). While these types of behavior relate to being an effective team member and promote efficiency, they do not involve the active influence that is essential to leadership. Consistent with this conceptualization, a recent study found only a moderate correlation between shared leadership and cooperation or helping (Ziegert, 2005).

Shared leadership is also distinct from team cognition constructs, such as transactive memory systems (TMSs), or structures through which members can collectively encode, store, Shared and retrieve information and expertise (Wegner, 1987), and team mental models (TMMs), or shared understandings about attributes of the team or the task at hand (Cannon-Bowers, Salas, & Converse, 1993). Conceptually, the primary distinction between shared leadership and these team knowledge structures is that the former concerns collective influence, whereas the latter concerns collective cognition. This conceptual difference may perhaps best be seen in the distinction between measurement approaches. Shared leadership assesses the distribution of leadership among team members. TMS measures capture team-level systems for utilizing and integrating individually and collectively held expertise (Lewis, 2003). TMMs assess the similarity and accuracy of individual mental models within a team (Marks, Zaccaro, & Mathieu, 2000). Although distinct concepts, shared leadership likely facilitates the development of TMMs and TMSs through continual influence-based interactions and social exchanges (Klimoski & Mohammed, 1994) that occur as team members share leadership responsibilities. Reciprocally, through effective coordination ofexpertise and the development of mutual understandings, TMS and TMM likely enable the emergence of shared leadership.

Finally, emergent leadership refers to group members who exert significant influence over other members of the group although no formal authority has been vested in them (Schneier & Goktepe, 1983). Shared leadership is consistent with some of the early group research by Bales (1953), who found that two informal leaders often tend to emerge in leaderless groups: one focused on the task, and one concentrating on relational issues.

This literature is similar to shared leadership in that it typically concerns whether leadership is provided informally by a group member (known as an 'emergent leader') in addition to or instead of a formally appointed leader (e.g., Wheelan & Johnston, 1996). However, emergent leadership research differs by focusing on the characteristics of the individual and the group that predict informal leadership emergence, as well as narrowly considering only 1 or 2 persons as emergent leaders and ignoring the leadership influence of others. In sum, shared leadership is distinct from emergent leadership in that the former can take place in a team with or without a designated leader, can be either formal or informal, and considers the distribution and sharing of leadership among all team members in contrast to a restriction to only one or two leaders.

2.11 Antecedent Conditions: Internal and External

Researchers studying shared leadership have argued that in order for shared leadership to emerge, two sets of activities must occur (Katz & Kahn, 1978). First, team members must offer leadership and seek to influence the direction, motivation, and support of the group. Second, the team as a whole must be willing to rely on leadership by multiple team members. In order for these individual and collective behaviors to occur, team members must believe that offering and accepting influence to and from fellow team members is welcome and constructive. We considered key factors - both internal and external- that are likely to impact the development of shared leadership in teams through these mechanisms. The first condition is an internal team environment that supports the development of shared leadership over time, and the second is the level of supportive coaching provided by an external leader.

We propose first that shared leadership is facilitated by an overall team environment that consists of three dimensions – shared purpose, social support, and voice. These dimensions have been drawn from a review of literature on shared leadership (Avolio et al., 1996; Barry, 1991; Pearce & Conger, 2003; Seers, 1996; Yukl, 1989), and represent distinct concepts that are also highly interrelated and mutually reinforcing, thereby representing a higher-order construct (Edwards, 2001; Law, Wong, & Mobley, 1998). We refer to them here, collectively, as an internal team environment enabling shared leadership because they work together to produce the kind of team context that encourages the willingness to both offer leadership influence and rely on the leadership of other team members (Katz & Kahn, 1978).

Shared purpose is the first dimension of an internal team environment enabling shared leadership. Shared purpose exists when team members have a similar understanding of the team's primary objectives and take steps to ensure a focus on collective goals. Prior work has theorized and demonstrated that team members who have a common sense of purpose and agreed upon goals are more likely to feel motivated, empowered and committed to their team and work (Kirkman & Rosen, 1999; O' Leary-Kelly, Martocchio, & Frink, 1994; Liden *et al.*, 2000). These heightened levels of motivation, empowerment, and commitment that individuals experience when the team possesses a shared purpose increase the willingness of team members to share the team's leadership responsibilities (Avolio *et al.*, 1996). In addition, with a commonly understood set of objectives and direction, team members will be more likely to establish goals and take actions that support the activities of other team members, thereby facilitating both goal-oriented and

work-directive leadership behaviors by team members (Seers, 1996), as well as a collective direction to team activities (Yukl, 1989).

The second dimension of an internal team environment that supports shared leadership is social support, which is defined as team members' efforts to provide emotional and psychological strength to one another. Team members support one another through encouraging and recognizing individual and team contributions and accomplishments (Marks et al., 2001). This helps to create an environment where team members feel that their input is valued and appreciated. By actively participating in the team and feeling supported team members are more likely to work cooperatively and develop a sense of shared responsibility for team outcomes (Kirkman & Rosen, 1999). Social support is associated with group maintenance and culture (Yukl, 1989), leader support/supportive behaviors (Seers, 1996), relational leadership (Barnard, 1938), and developing and maintaining the team by providing "interpersonal glue" that helps build a strong internal social network within the team (Barry, 1991).

The third dimension of this internal team environment is voice. There is not a standard definition of voice in the literature, as it has been used in a variety of research areas to describe constructive change-oriented communication, participation in decision making, involvement, certain extra-role work behaviors, due process, and employee grievance procedures (Van Dyne & LePine, 1998); however, at its core it connotes participation and input. We define it here as the degree to which team members have participation and input into how the team carries out its purpose. Voice is associated with interaction facilitation/participative behaviors in teams (Seers, 1996), and these types of behaviors can result in higher levels of social influence among team members through increased

engagement and involvement. In addition, voice has been associated with participation in decision making and constructive discussion and debate around alternative approaches to team goals, tasks and procedures (De Dreu & West, 2001; Simons, Pelled, & Smith, 1999), which can improve the amount of collective influence, involvement, and commitment relative to important team decisions. Thus, the presence of high levels of voice in a team should create an environment where people engage in mutual leadership by being committed to and becoming proactively involved in helping the team achieve its goals and objectives and constructively challenging each other in pursuit of group goals.

These three dimensions are mutually reinforcing and complementary. When team members are able to speak up and get involved (voice), the likelihood that many of them will exercise leadership increases greatly. The opportunity for voice also facilitates shared leadership by strengthening both a common sense of direction and the potential for positive interpersonal support within the team. When teams are focused on collective goals (shared purpose), there is a greater sense of meaning and increased motivation for team members to both speak up and invest themselves in providing leadership to the team and to respond to the leadership of others. The motivation to participate and provide input towards common goals and purpose can also be reinforced by an encouraging and supportive climate. When team members feel recognized and supported within the team (social support) they are more willing to share responsibility, cooperate, and commit to the team's collective goals. Thus, these three dimensions work together to create an internal team environment that is characterized by a shared understanding about purpose and goals, a sense of recognition and importance, and high levels of involvement, challenge, and cooperation.

Therefore, we predict: *Hypothesis 1. An internal team environment consisting of shared purpose, social support, and voice will be positively related to the level of shared leadership within the team.*

2.12 External Team Coaching

Scholars studying shared leadership and leadership in self-managing teams have noted the critical role of external team leaders in the development of team members' motivation and capabilities to lead themselves and become self-directed (Kozlowski et al., 1996; Manz & Sims, 1987). When discussing this role, researchers frequently stress the importance of coaching behaviors, which Hackman and Wageman define as external team leaders' "…direct interaction with a team intended to help team members make coordinated and task-appropriate use of their collective resources in accomplishing the team's task" (2005). Researchers have identified different types of team coaching, distinguishing between forms that are more supportive and reinforcing of the team's self-leadership as compared to those that focus on identifying team problems and engaging in active task interventions which interfere with the team's autonomy and self-management (Morgeson, 2005; Wageman, 2001). Here, we specifically refer to the former, which has been called "supportive coaching" (Morgeson, 2005) because it is more closely connected with the development of team self-management, initiative, and autonomy, whereas active coaching is more likely to undermine these team characteristics and possibly inhibit the development of shared leadership. Supportive coaching can also be distinguished from other external team leadership functions such as designing the teamand its task (Wageman, 2001) and facilitating boundary management (Druskat & Wheeler, 2003).

Through supportive coaching external team managers can contribute to the development of shared leadership in a variety of ways. First, by engaging in behaviors such as encouraging, reinforcing, and rewarding instances where team members demonstrate leadership, supportive coaching fosters among team members a sense of self-competence and team independence (Manz & Sims, 1987). When team members believe that they have significant autonomy and are confident in their skills to self-manage the work of their team they should be more likely to demonstrate leadership. Supporting this assertion, supportive coaching by a team manager has been found to be positively associated with the degree to which team members demonstrate self-management (Wageman, 2001). Second, by providing their teams with encouragement and support, external coaching can help build a shared commitment to the team and its objectives which can reduce free riding behavior and increase the likelihood that team members will demonstrate personal initiative (Hackman & Wageman, 2005). Third, by giving their teams suggestions about appropriate task strategies that will ensure that their activities are well aligned with work requirements and demands (Hackman & Wageman, 2005), team members will have greater clarity on how to best manage their workand processes and thereby be more likely to influence each other because this understanding will be shared across team members (Kozlowski et al., 1996). *Therefore, we predict: Hypothesis 2. External team coaching will be positively related to the level of shared leadership within the team.*

The second – and more indirect – way in which external coaching may influence shared leadership is based on a functional approach to team leadership which states that the role of the external team leader is to do whatever is not being adequately managed by the

team itself (Hackman & Walton, 1986). When teams have a supportive internal environment, team coaching by an external team leader is likely to be largely redundant with this internal environment and therefore less critical to the emergence of shared leadership among team members.

However, for teams that lack a strong shared purpose, do not promote full engagement and participation, and where team members are unable to provide each other with social support, a functional leadership perspective suggests that the external leader's coaching may be particularly important in helping teams overcome these liabilities and facilitate the development of shared internal leadership. Specifically, effective team coaching by an external leader - focused on building collective commitment to the team and its work, assisting the team with aligning their activities with task requirements, and fostering independence - can help provide the motivational and consultative functions (Hackman & Wageman, 2005) that enable shared leadership but have not been adequately developed by the team internally. External team leaders can also help team members understand the different skills and capabilities of team members and how they can be integrated to address the demands of the task. This understanding can motivate individual team members to initiate and engage in internal leadership activities and do so in a coordinated fashion resulting in an emergent pattern of shared leadership. In this fashion, an external team leader through supportive coaching can provide the means by which shared leadership may emerge when a team has yet to develop a high level of social support, shared purpose, and voice.

Based on the foregoing nature of the relationships between the internal team environment and an external leader's team coaching, we therefore make the following prediction:

Hypothesis 3. Team coaching by an external leader interacts with the internal team environment in predicting shared leadership such that coaching will be found to be more strongly related to shared leadership when the internal team environment is unsupportive.

2.13 Outcomes of Shared Leadership

Four outcomes have been measured and documented on the relationship between shared leadership and team performance (D'Innocenzo et al., 2014; Nicolaides et al., 2014), namely *Team Success* (Pearce & Sims, 2002), *Innovation* (Hoch, 2013), *Team Proactivity* (Erkutlu, 2012) and *New Venture Team Performance* (Barnett & Weidenfeller, 2016; Ensley et al., 2006). This positive relationship between shared leadership and the above-mentioned outcomes provides evidence that the positive correlation supports the validity of shared leadership (Barnett & Weidenfeller, 2016).

Morgeson et al. (2010) identified fifteen important team leadership functions and recorded them into two phases. Firstly, the conversion phase which includes the team composition, mission definition, goal establishment, planning, educating the team members, understanding team occurrences and offering feedback. Secondly, the achievement phase includes monitoring team performance, actioning the team's work, problem solving, resource provision, and encouraging self-management within the team.

These leadership attributes suggest the process by which shared leadership outcomes can be reached. However, these functions may not necessarily be equally distributed at a given time; and some of these functions may require vertical leadership, as well as shared leadership, to have effective outcomes (Barnett & Weidenfeller, 2016).

External leaders from a team within the organisation, team sponsors or coaches can effectively help teams facing unique, difficult or disruptive circumstances to improve outcomes (Barnett & Weidenfeller, 2016; Morgeson, 2005). Specific individual qualities like trust, intelligence, innovation, openness to experience and emotional stability which positively affects team performance outcomes (Barnett & Weidenfeller, 2016; Hoch, 2013; Seers, Keller & Wilkerson, 2003). D'Innocenzo et al. (2014) suggest that individuals who can accept leadership from peers, and who had effective self-leadership, may be good candidates for shared leadership teams – resulting in improved team performance outcomes.

Barnett and Weidenfeller (2016) advocate that shared leadership takes time to learn and expound as the team goes through different stages, different roles and different functions, which may also be important on different levels, to eventually provide desirable outcomes. Bergman, Rentsch, Small, Davenport and Bergman (2012) found that as shared leadership behaviour increased in the members of the team, and shared leadership teams experienced less clashes, greater agreement, increased team trust and unity compared to those without shared leadership.

Methodological moderators and mediators get closer to the difficulties of shared leadership, which usually strengthened the relationship with team performance outcomes (D'Innocenzo et al., 2016; Nicolaides et al., 2014). Shared leadership outcomes are numerous, and various moderators and mediators' impact these either positively or negatively on team performance.

2.14 Shared Leadership versus Traditional Leadership

Traditional leadership has been seen as a top-down procedure where a single leader is isolated which is opposite to shared leadership (D'Innocenzo et al., 2016). Shared leadership is significant and unique in that it emerges from traditional leaders willing to give leadership authority to team members, and follow their colleagues (Chiu et al., 2016; DeRue, 2011). Shared leadership causes the emergence of official and unofficial leaders in teams (Yukl & Mahsud, 2010). It moves beyond the top-down, traditional-type leadership to an energetic give-and-take relationship (Pearce et al., 2009; Pearce et al, 2014). Shared leadership is a better forecaster of team performance than traditional leadership (D'Innocenzo et al., 2016; Ensley et al., 2006) or typical traditional hierarchical leadership structures (Carson et al., 2007). Pearce et al. (2014) suggest that traditional leaders can inspire or expire the development of shared leadership within organisations, therefore the traditional leader must know their roles and goals. Shared leadership is significant as it is not intending to replace traditional leadership (Pearce & Sims, 2002), but rather to enhance team performance. Pearce et al. (2014) intimate that shared leadership and traditional leadership work in tandem depending on what is needed.

Barnett and Weidenfeller (2016) suggest that good traditional leadership can accelerate shared leadership. However, they caution that dictatorial leadership may suppress shared leadership and they continue to propose that developed shared leadership can complement the impact of good traditional leadership (Barnett & Weidenfeller, 2016).Hoegl and Muethel (2016) expanded on why leaders are blinded to shared leadership.

Firstly, they deem leadership as an assumed position that cannot be shared; secondly, they are overconfident in their leadership role and see themselves as superior; and thirdly, they fear becoming dispensable. Leaders are often intimidated by shared leadership. However, Grille and Kauffeld (2015) and McIntyre and Foti (2013) found that when team members were asked to nominate leaders within the team, the number who were nominated showed a high degree of shared leadership. This would be achieved by accepting the new rules of the game, respecting team members' capabilities, encouraging leadership behaviour, loosening the leadership reins, avoiding responsibility traps and becoming a true team member (Hoegl & Muethel, 2016).

There are benefits and challenges to shared leadership, as has been measured. Organisations would need to know and understand these to know when to allow, implement or disallow shared leadership in regards to optimal managerial team performance.

Figure 2.7 Traditional Leadership Vs Shared Leadership

Sources: (Wood and Fields 2006)

2.15 Performance Defined

Performance according to oxford advance learner's dictionary defines performance to be ability to operate efficiently and react quickly. However, Campbell (1990) in Armstrong (1999) it defines performance in relation to outcome or accomplishment to be about doing the work as well as being about the result achieved. Therefore, performance could be regarded as behavior –the way in which organization, teams, and individual get work done. Various researchers and writers have defined performance management in different perspectives.

2.16 Performance Measures

According to Armstrong 1999, performance measures are agreed when setting an objective, which aims to define not only what is to be achieved but also how those will know that has been achieved. Performance measures shows evidence of whether or not result has been achieved but shows the extent of achievement as well.

Measuring performance can be simply done by finding an easy way to measure factors that seem to relate directly to the abstract quality such as work outcome. As this may be an easiest way to quantify and immeasurable factor to prevent a subjective performance review process (Alden 2006).

Also, according to (Denton 2006), there is a wide range of potentially relevant performance measure that organization could use. Some of these are financial most related to cost; other useful measures include labor, productivity, efficiency, and employee turnover, inventory, and percentage increase in inventory turns. However, these are measures at organizational level.

2.17 Team Performance

Team performance can be defined based on various indicators, such as productivity, quality of decision-making, financial performance (Chudoba et al 2006). There are several works, which has been carried out on team performance, but I have found the work of (Chudoba et al 2006) to be relevant and suit this research work.

In their research paper, they have Identify four key aspect of performance, which are essential to team performance (Chudoba et al 2006), (Grabowski and Roberts1999), (Jarvenpaa and Leidner 1999), (Ajaya 2010) these includes team participation, overall outcome, communication and trust. Moreover, because the primary aims of measuring the team performance was to examine the internal cohesion with the team and the resulting outcome. Thus, two performance variables were used to capture the performance aspect in the team. Both performance criteria are important to measure the overall effectiveness of the teams. They are as follows;

i. Team participation and coordination
ii. Work outcomes.

2.17.1 Team Participations and Coordination

A team can consist of several members whose tasks and responsibility are different according to team role division. Therefore, coordination becomes highly important to ensure members perform actively. Task undertaken by members must be assigned and sequenced to accomplish the goals and objectives of the team (Chudoba et al 2006). Also, the fact that team leader is often the key to the process of coordinating team activities. However, some team such as self-managed teams lack a designated leader thus may be less efficient in team development that could make the team performance at the end

(Chudoba et al 2006). A member of a self-managed team tends to be feeling apathy due to lack of authority figure. Therefore, we examined the level of commitment and participation of the members to measure effectiveness in the team.

2.17.2 Work Outcome

An additional important factor in assessing performance of team is the teamwork outcomes. It simply means that the result of work done will be examined if it aligns with goals and objectives that were aimed from the start.

2.18 Team Defined

Several authors have defined team in different perspective. Generally, a team is defined as ‘a group of two or more individuals who must interact cooperatively and adaptively in pursuit of shared valued objectives (Kanawattanachai and Yoo 2002). In another perspective Katzenbach and smith 1993 defined team as a small number of people with complementary skill who are committed to common purpose, performance goals and approach for which they hold themselves mutually accountable. Teams have been generally formed for purpose either in an organization or schools. In school undergo team formation for assignment, project, which are smaller work group and likewise in organization as well. Meanwhile, the task design might however be more demanding in the organization level than school setting; both are born to engage on a mission.

2.18.1 Characteristics of a Team

i. Teams are basic unit of every organization.

ii. Teams outperform individuals acting alone especially when performance

iii. requires multiple skills.

iv. Teams are created and energized by significant performance challenges.

v. Teams usually consist of individuals that are united or created for a

vi. common purpose and objectives.

(Armstrong, 1999).

2.19 Self-Managed Team Defined

This is type of team, which consists of individuals who learn all the tasks of all group members, which allows them to share responsibilities. These teams also take over supervisory duties because there is no direct supervision. Recently, SMT have become more popular and will apparently be even more useful in the future (Hodgetts and Luthan 2000).

Meanwhile Armstrong 1999 described SMT as an autonomous work group that has allocated tasks and were given discretion on the way the work is done. They sole control their own work, which will include feedback information. Self-managed teams are mainly characterized by having members sharing the leadership functions such as decision -making. The was conceptualized due to the reason that having only one leader in a team may slow decision making which are crucial to the progress and subsequently the success of the team.

2.19.1 Evolution of Self Managing Team

Self – Management is important area of study to many researchers. It is a new form of idea that became popular in 1950s. It was developed based on the assumptions that participative leadership is the best approach to leading and also that people have a need for autonomy and self-direction (Wright, 1996). Therefore, there have been a demand and use of self-managing teams in organization (Wright, 1996) of which schools are not left out in a recent time.

In organization context there was job design that aims to promote self -management for employees to increase the amount of control that people could have over their job. The aim was also to provide autonomy that will provide motivation, job satisfaction and hence improve performance overtime. The concept of self-managing team was an offshoot of social technical theory that is mainly concerned with ensures the best connection between social and technical system within organization. As the interest in this approach to job design grows, there was need to develop people to manage their work and as well their behaviors to facilitate responsible work outcome. Also, the interchangeability of task and development of skill that can facilitate continuity in performance is another tenet for the development of self-managing team. Consequently, the concept of self-managing team was borne (Wright, 1996)

2.19.2 Characteristics of a Self-Managed Team

i. It consists of individual with different skills and sometime diverse background (cross culture teams.

ii. The team decides on methods and approach to planning, sharing, scheduling and control of work.

iii. They have substantial degree of autonomy on decision-making and control of their activities related to task on day-to-day basis.

iv. Sometimes, team can select their internal leader that neutralizes the need for external supervisory control (Wright, 1996)

2.20 Team Processes

Team processes are central to most, team effectiveness models (Guzzo & Shea, 1992; Gist, Locke & Taylor, 1987; Hackman, 1983). McGrath's (1964) Input-Process-Outcome

(IPO) model has served as a model for organisational studies for several decades. Inputs refer the antecedent factors that drive and inhibit team member interaction. These antecedents may comprise individual team member characteristics (e.g., knowledge, personalities), team-level factors (e.g., interdependencies, external leader influences), and organisational and contextual factors (e.g., HRM systems, environmental dynamism; Mathieu, Maynard, Rapp, &Gilson, 2008). Outcomes refer to a result that is valued by constituents. For example, in the context of project teams, an outcome may involve timely completion, prudent use of resources, or quality of the product. The linking points that enable the conversion of inputs to outputs are team processes. Team processes refer to how team members interact toward project goal. Traditionally, team processes were considered as either "taskwork" or "teamwork" (McIntyre & Salas, 1995; Oser, McCallum, Salas, & Morgan, 1989; Stout, Cannon-Bowers, Salas, & Milanovich, 1999). In essence, task work explains roles that individuals must do to achieve the team's task, while teamwork describes the interaction among team members (McIntyre & Salas, 1995). Based upon this, Marks, Mathieu & Zaccaro (2001) proposed a nomenclature of processes that comprised three classification: transition, action, and interpersonal. In the transition stages, team members concentrate on endeavours such as mission analysis, planning, goal specification, and formulating strategies. In the action stages, members focus on task achievements, monitoring progress and systems, coordinating team members, and monitoring and supporting themselves. Finally, the interpersonal stages comprise conflict management, motivation and confidence building, and affect management and perhaps oblivious through periodic stages.

2.20.1 Transition Processes

Marks *et al* (2001) theorised team processes as occurring periodically with transition processes setting the stage for later actions. There is little empirical research on transition processes. Janicik & Bartel (2003) posit that planning contributed to establishment of norms regarding how teams would control time. In turn, those time-based norms were found to associate positively to performance. Hiller, Day & Vance (2006) found that shared leadership display such as planning and organising, significantly predicted supervisor-rated team performance. Teams that involve in transition processes tend to do better than those who do not. Specifically, teams that do involve in transition processes are more likely to concentrate on coordination issues, a tactic that ultimately contributes to better performance (Weldon, Jehn, & Pradhan, 1991). In their examination of project Mathieu &Schulze (2006) used an episodic model of team processes and argued that dynamic planning (i.e., contingency and reactive planning) was significantly related to performance. Besides, Mathieu & Rapp (2008) demonstrated how initial team activities, such as the quality of deliberate performance plans and team charters, associated positively to the forms of team performance displayed over time.

2.20.2 Action Processes

While transition processes have received little research concentrations, action processes are often involved in team researches. Given this, there are abundant research that establishes the key role that processes such as communication and coordination play in team performance (LePine, Piccolo, Jackson, Mathieu, & Saul, 2008). For example, Tesluk & Mathieu (1999) argued that team communication and coordination affected problem management actions. Particularly, communication, cooperation, and

coordination within teams have been linked to work group effectiveness (Campion, Medsker, & Higgs, 1993; Campion, Papper, & Medsker, 1996; Gladstein, 1984). Communication is the way in which team members exchange information and can vary greatly between teams in terms of the quality of exchange.

For instance, frequency of exchanges (i.e., time spent communicating), formalization (i.e., spontaneous or planned), and the communication structure (i.e., direct or indirect) can all influence the quality of action processes in terms of communication among team members (Hoegl &Gemuenden, 2001). Particularly, Katz and Allen (1984) found that high levels of within-team communication positively influenced project success. In their study of cross-functional project teams, Hauptman and Hirji (1996) found that frequently used communication structures involving two-way communication led to better performing teams.

Another component of action processes, coordination, enables teams to effectively respond to problems that arise during task progression. Coordination is often cited as a critical component for project success (Baker, Murphy, & Fisher, 1983; Chiocchio, Grenier, O'Neill, Savaria, & Willms, 2012; Cleland & King, 1983; Jha & Iyer, 2006). For example, Tesluk and Mathieu (1999) examined 88 maintenance and construction road crews in a state department of transportation. They found that team coordination affected problem management actions; specifically, those teams that engaged in higher levels of coordination were able to manage problems and identify solutions, which led to higher levels of performance. De Dreu & West (2001) argued the importance of team member participation. Particularly, in two distinct samples, it was concluded that participation interacts with minority opposition to increase team creativity. Similarly, Johnson,

Hollenbeck, Humphrey, Ilgen, Jundt & Meyer (2006) indicated that a team's reward system can affect their level of information sharing and as a result shape, speed, and accuracy of their decision making. Besides, Porter (2005) indicated that backup behaviours is significantly related with decision-making performance.

2.20.3 Interpersonal Processes

The interpersonal process component comprises conflict, motivation, confidence building, and affect. However, studies have been carried out on all the components, studies on conflict received most attention. In a meta-analysis De Dreu & Weingart (2003) that both relationship and task conflict have positive, negative correlations with team performance and member satisfaction. Jehn, Northcraft, & Neale (1999) studied task conflict and indicated that informational diversity significantly influenced performance. Raver & Gelfand (2005) investigated relationship conflict and found that it mediated the relationship between ambient sexual hostility and team financial performance.

Studies have considered interpersonal processes apart from conflict. For instance, study have demonstrated that feedback has a significant impact on motivation, interpersonal trust, and overall performance in virtual teams (Geister, Konradt, & Hertel, 2006). Moreover, Mathieu & Schulze (2006) considered a combined metric of interpersonal processes and indicated a significant, positive association with performance. Similarly, Maynard, Mathieu, Marsh, & Ruddy (2007) noted that such a combined metric of interpersonal processes provided the cross-level mechanism by which team-level resistance to empowerment climate linked to individual-level satisfaction. Lastly, Bradley, White, & Mennecke (2003) posit that temporal components of team and task are

crucial to the effect of interpersonal mediations on team performance. They argued that past researches were carried out with teams that briefly completed contrived tasks and were then disbanded. In a meta-analysis, Bradley *et al.* (2003) noted that there is rich encouragement for the controversy that interpersonal processes relate significantly to team performance when teams involve in longer term tasks. More recently, De Wit, Greer, & Jehn (2012) carried out a meta-analysis on team conflict by examining its relationships using a number of distal and proximal outcomes. Distal outcomes of conflict represent constructs such as team performance, whereas proximal outcomes involve emergent states or team viability. Emergent states are mediating mechanisms (i.e., between inputs and outcomes) that involve cognitive, motivational, or affective states (Marks *et al.*, 2001). Team feasibility represents the probability that a particular team will remain together. While De Wit *et al.* (2012) meta-analysis applied a variety of team types, the findings are applicable to the project team context because interpersonal processes, particularly conflict, perform a key role in project success.

Results generally support previous findings but also argued that task conflicts (1) can occur without relationship conflicts also occurring, (2) are less likely to be emotional (Yang & Mossholder, 2004), (3) are less likely to escalate (Greer, Jehn, & Mannix, 2008), and (4) are less likely to impair group performance (Peterson & Behfar, 2003; Shaw et al., 2011; Simons & Peterson, 2000). Most interesting, however, relationship conflict was less negatively linked to group performance among studies in which groups worked on project tasks. Said differently, project team performance was less affected by relationship conflict than other organisational teams. This finding is surprising and suggests an interesting area for future research. Why is project team performance not as

affected by relationship conflict? Is it due to the short duration of some projects such that relationship conflicts do not have time to fester? Additionally, as mentioned earlier, the definition of project performance or project team performance should be considered. De Wit *et al.*'s (2012) meta-analysis used performance as a collapsed measure, which considered performance measurements as homogeneous. Flushing out different types of performance metrics (e.g., scheduling, budget, and team effectiveness), as well as affective versus objective measures, may uncover unique effects and may help to explain the influence of conflict on project performance.

2.20.4 Other Processes

Though the work of Marks *et al.* (2001) gives an appropriate nomenclature, however, not all team processes fall nicely under one of the three established components. For example, team creative processes have been explained as "members working together in such a way that they relate ideas from several sources, examine into unidentified areas to find better solutions to a problem, or seek out new ways of doing a task (Gilson & Shalley, 2004). It has long been established that creativity is an important driver of team effectiveness (Hackman & Morris, 1975; Stein, 1974; Taggar, 2002; Tesluk, Farr, & Klein, 1997),and another study have found that team creative processes have a significant positive relationship on performance (Gilson, Mathieu, Shalley & Ruddy,2005). Besides, while Gilson *et al.* (2005) indicated no direct relationship between creativity and customer satisfaction, they did find that creativity interacted with standardization such that high standardization and creativity led to high levels of customer satisfaction. It is interesting to note that the brainstorming literature has constantly indicated that groups

who brainstorm are more satisfied and pleased with the ideas they generate (Paulus, 2000).

2.21 Situational Attributes

2.21.1 Attitude

Attitude assess individual statements either about objects, people, or events. They reflect how people perceive their environment. When someone says "I like my job," He is expressing his attitude about his work.

2.21.2 Components of Attitudes

Generally, studies have found that attitudes have three dimensions: cognition, affect, and behaviour (Breckler, 1984). Cognitive part is an explanation of the manner things are. For example, "My pay is low". It sets the stage for the more key aspect of an attitude.

Affective part is the feeling component of an attitude and is revealed in the statement "I am angry over how little I'm paid." Finally, affect can lead to behavioural outputs. Behavioural dimension of an attitude explains an intention to behave in a specific manner toward something. For example, "I'm going to look for another job that pays better." Previous study on attitudes argued they were positively related to behaviour that is, the attitudes of people determine what they do. However, in the late 1960s, a review of literature criticised this assumed effect of attitudes on behaviour (Wicker, 1969). Researches have mostly established that people do seek consistency among their attitudes and between their attitudes and their behaviour (Fabrigar, Petty, Smith, & Crites,2006). They either change the attitudes or the behaviour, or they create a rationalisation for the discrepancy.

The most powerful moderators of the attitude's relationship are the significance of the attitude, its correspondence to behaviour, its accessibility, the presence of social pressures, and whether a person has direct experience with the attitude. Important attitudes reflect our fundamental values, self-interest, or identification with individuals or groups we value. These attitudes tend to show a strong association to our behaviour. Particularly attitudes tend to predict specific behaviours, whereas general attitudes tend to best predict general behaviours. For instance, asking someone about her intention to stay with an organisation for the next 6 months is likely to better predict turnover for that person than asking her how satisfied she is with her job overall. On the other hand, overall job satisfaction would better predict a general behaviour, such as whether the individual was engaged in his/her work or motivated to contribute to her organisation (Harrison, Newman, & Roth, 2006). Attitudes that our memories can easily access are more likely to predict our behaviour. Discrepancies between attitudes and behaviour tend to happen when social pressures to behave in specific manner hold exceptional power, as in most situations. Lastly, the attitude behaviour relationship is likely to be much stronger if an attitude refers to something with which we have direct personal experience.

2.21.3 Perception

Perception is a process by which individuals form and interpret their sensory impressions in order to give meaning to their surroundings. However, what we perceive can be considerably different from objective reality. For example, all employees in a firm may view it as a great place to work favourable working conditions, interesting job assignments, good pay, excellent benefits, understanding and responsible management but it's very unusual to find such agreement.

Individuals may look at the same thing yet perceive it differently. A number of factors operate to shape and sometimes change perception. These factors can reside in the perceiver; in the object, or target, being perceived; or in the context of the situation in which the perception is made. When you look at a target and attempt to interpret what you see, interpretation is deeply influenced by your personal characteristics your attitudes, personality, motives, interests, past experiences, and expectations. Characteristics of the target also affect what we perceive. Loud people are more likely to be noticed in a group than quiet ones. So, too, are extremely attractive or unattractive individuals. Because people don't look at targets in isolation, the relationship of a target to its background also influences perception. People often perceive women, men, Whites, African Americans, Asians, or members of any other group that has clearly distinguishable characteristics as alike in other, unrelated ways as well. Context matters too. The time at which people see an object or event can influence their attention, as can location, light, heat, or any number of situational factors.

Attribution theory explain the manner in which people are judge differently, depending on the meaning of attribute to given behaviour (Martinko, 2011). It argued that when an individual's behaviour was observed, there is an attempt to determine whether it was internally or externally caused. That determination, however, depends largely on three factors: (1) distinctiveness, (2) consensus, and (3) consistency. Internally caused behaviours are those believed to be under the personal control of the individual. Externally caused behaviour is what we imagine the situation forced the individual to do. Distinctiveness refers to whether an individual display different behaviours in different situations. Is the employee who arrives late today also one who regularly. What is to be

known is whether this behaviour is unusual. If it is, is likely to give it an external attribution. If it's not, we will probably judge the behaviour to be internal.

If everyone who faces a similar situation responds in similar manner, then behaviour shows consensus. The behaviour of a tardy employee meets this criterion if all employees who took the same route were also late. From an attribution perspective, if consensus is high, you would probably give an external attribution to the employee's tardiness, whereas if other employees who took the same route made it to work on time, you would attribute his lateness to an internal cause.

Finally, an observer looks for consistency in a person's actions. Does the person respond the same way over time? Coming in 10 minutes late for work is not perceived in the same way for an employee who hasn't been late for several months as it is for an employee who is late two or three times a week. The more consistent the behaviour, the more we are inclined to attribute it to internal causes. One of the most interesting findings from attribution theory research is that errors or biases distort attributions. When judgments are made about the behaviour of other people, we tend to underestimate the influence of external factors and overestimate the influence of internal or personal factors (Ross, 1977).

Halo Effect: When we draw a general impression about an individual on the basis of a single characteristic, such as intelligence, sociability, or appearance, a halo effect is operating (Rosenzweig, 2007). If you're a critic of someone, try listing 10 things you admire about him. If you're an admirer, try listing 10 things you dislike about him. No matter which group describes you, odds are you won't find this an easy exercise! That's the halo effect: our general views contaminate our specific ones.

The reality of the halo effect was confirmed in a classic study in which subjects were given a list of traits such as intelligent, skillful, practical, industrious, determined, and warm and asked to evaluate the person to whom those traits applied (Asch, 1946). Subjects judged the person to be wise, humorous, popular, and imaginative. When the same list was modified to include "cold" instead of "warm," a completely different picture emerged. Clearly, the subjects were allowing a single trait to influence their overall impression of the person they were judging.

People love children so much that one would look bad in comparison with them. This example demonstrates how a contrast effect can distort perceptions. We don't evaluate a person in isolation. Our reaction is influenced by other persons we have recently encountered. In a series of job interviews, for instance, interviewers can make distortions in any given candidate's evaluation as a result of his or her place in the interview schedule. A candidate is likely to receive a more favourable evaluation if preceded by mediocre applicants and a less favourable evaluation if preceded by strong applicants.

Stereotyping: When we judge someone on the basis of our perception of the group to which he or she belongs, we are using the shortcut called stereotyping (Hilton, 1996).

We rely on generalizations every day because they help us make decisions quickly; they are a means of simplifying a complex world. It's less difficult to deal with an unmanageable number of stimuli if we use heuristics or stereotypes. For example, it does make sense to assume that someone from accounting, is going to know something about budgeting, or someone from finance will be able to help you figure out a forecasting problem. The problem occurs, of course, when we generalize inaccurately or too much.

In organisations, we frequently hear comments that represent stereotypes based on gender, age, race, religion, ethnicity, and even weight (Ostroff and Atwater, 2003).

"Men aren't interested in child care," "Older workers can't learn new skills," "Asian immigrants are hardworking and conscientious." A growing body of research suggests stereotypes operate emotionally and often below the level of conscious awareness, making them particularly hard to challenge and change (Dasgupta, DeSteno, Williams & Hunsinger, 2009).

Stereotypes can be deeply ingrained and powerful enough to influence life-and-death decisions. One study, controlling for a wide array of factors (such as aggravating or mitigating circumstances), showed that the degree to which black defendants in murder trials looked "stereotypically black" essentially doubled their odds of receiving a death sentence if convicted (Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006).

2.21.4 Motivation

The study of motivation is focused, basically, with why people behave in a certain way. The basic underlying question is 'Why do people do what they do?' In general terms, motivation can be described as the direction and persistence of action. It is concerned with why people choose a particular course of action in preference to others, and why they continue with a chosen action, often over a long period and in the face of difficulties and problems (Krech, Crutchfield, and Ballachey, 1962). From a review of motivation theory, Mitchell identifies four common characteristics which underlie the definition of motivation (Mitchell, 1982).

Motivation is typified as an individual phenomenon. Every person is unique and all the major theories of motivation allow for this uniqueness to be demonstrated in one way or

another. Motivation is described, usually, as intentional. Motivation is assumed to be under the worker's control, and behaviours that are influenced by motivation, such as effort expended, are seen as choices of action. Motivation is multifaceted. The two factors of greatest importance are: (i) what gets people activated (arousal); and (ii) the force of an individual to engage in desired behaviour (direction or choice of behaviour). The purpose of motivational theories is to predict behaviour. Motivation is not the behaviour itself and it is not performance. Motivation concerns action and the internal and external forces which influence a person's choice of action. On the basis of these characteristics, Mitchell defines motivation as 'the degree to which an individual want and chooses to engage in certain specified behaviours.

2.22 Shared Leadership and Team Performance

In literature about shared leadership the terms 'team performance' and 'team effectiveness' are used interchangeably. In this research team performance will be used, because the most important findings that were used to design the knowledge test are based on literature which used team performance to measure the outcome of shared leadership.

For example, Cohen, Ledford, and Spreitzer (1996) related self-managing work team effectiveness to performance. They concluded team effectiveness to be a combination of employee ratings of performance (quality, productivity, costs and safety), managerial ratings of performance (quality, efficiency and overall performance) and quality of work life (job satisfaction, growth needs satisfaction, group satisfaction, organizational commitment and trust).

Recent findings have reported the confident relationship between shared leadership and team performance. However, researchers also caution that their understanding of how shared leadership is formed could negatively impact the team performance (Chiu et al., 2016). The positive relationship between shared leadership and team performance is confirmed by D'Innocenzo et al. (2016), as they measured a meta-analytical approach on two main task-related boundary conditions of task complexity and task independence.

They then tested for task and team satisfaction to find both empirically positive in relation to team performance. They claim that inconsistencies measured in literature put doubt to the validity of the relationship between shared leadership and team performance, however, these negativities are minimal. What D'Innocenzo et al. (2016) did determine was that the team task challenges related negatively to the scale of shared leadership and team performance, suggesting that the more complexity decreases the effect of shared leadership on team performance.

Shared leadership can be developed so that team performance is enhanced (Barnett & Weidenfeller, 2016). Zaccaro, Rittman and Marks (2001); LaFasto and Larson (2001) and Morgeson, DeRue and Karam (2010) establish that training in elements of shared leadership such as clear goal setting, reward behaviour, team confidence, prioritising, task cognition, trust, handling conflict, motivation and processes were recommended, which positively affected team performance (Barnett & Weidenfeller, 2016). Managers would need knowledge and insight to be able know when to implement shared leadership and when not to for optimal team performance.

2.23 Influence of Shared Leadership on Team Performance

There has been a growing support for the benefits of shared leadership to increase team performance (D'Innocenzo et al., 2014; Barnett & Weidenfeller, 2016). Overall, studies find a positive relationship between shared leadership and team performance (e.g. Wang et al., 2014; D'Innocenzo et al., 2014; Carson et al., 2007; Pearce & Sims, 2002). For example, according Katz and Kahn (1978), team members bring more resources to the task, share more information, experience higher commitment to the team, and receive influence of others or are open to it.

This leads to higher levels of team functioning, due to respect and trust (in D'Innocenzo et al., 2014). Furthermore, Wang and colleagues (2014) have studied the influence of shared leadership on different aspects of team effectiveness. They divided team effectiveness in to attitudinal outcomes, behavioural processes, emergent states, and subjective and objective outcomes. They found shared leadership more related to the attitudinal outcomes, behavioural processes, and emergent states, compared to subjective and objective outcomes. Attitudinal outcomes of teams are for example; overall satisfaction, commitment to the team, identification with the team, and emotional conflicts within the team. Wang et al. (2014) mentioned that behavioural processes and emergent states 'include team cohesion and coordination, helping, and so forth'.

However, shared leadership cannot be applied in all situations and to every team. Several critical conditions are required to enable shared leadership and enhance team performance, some of which will be explained below. These five conditions are used to make statements to measure the knowledge overlap of people in practice, via the knowledge test.

The first condition is the shared purpose within a team. Carson et al. (2007) and Daspit, Tillman, Boyd, and McKee (2013) speak of the presence of a shared purpose as a dimension of an internal team environment to enable shared leadership. Shared purpose consists of people who have the same idea about the primary objectives of the team and the way to reach the common goal (Carson et al., 2007). This shared purpose makes team members 'feel motivated, empowered, and committed to their team and work' (Kirkman & Rosen, 1999; Liden, Wayne, & Sparrowe, 2000; O'Leary-Kelly, Martocchio, & Frink, 1994 in Carson et al., 2007). These feelings make team members more willing to share the leadership and responsibilities in a team.

Task interdependence is the second dimension which is strongly positively related to shared leadership (Barnett & Weidenfeller, 2016; Pearce,2004; Burke et al., 2006; Fausing, Joensson, Lewandowski, & Bligh, 2015; Nicolaides, LaPort, Chen, Tomassetti, Weis, Zaccaro, & Cortina, 2014). Task interdependence can be explained as the extent to which members of a team are dependent on each other to accomplish tasks and reach goals (Burke et al., 2006). More task interdependence means more need for coordination to be able to perform as a team.

Third, Hoch, Pearce, and Welzel (2010) found a positive influence of low age diversity on the relationship between shared leadership and team performance. In age homogeneous teams, members are more likely to share leadership and treat each other similarly than in teams with a higher age diversity.

The fourth condition concerns the tenure of a team. Team tenure was found to have a negative impact on the relationship between shared leadership and team performance (Nicolaides et al., 2014). The sharing and balance of power becomes harder to control

over time. Thus, the longer a team is working together, the less useful shared leadership will be.

The last condition to enable shared leadership used in this study is work complexity. Pearce (2004) defined complex work as knowledge work, where input from various individuals is needed. This does not count for routine tasks. Multiple researchers found a strong relationship between shared leadership and team performance when the work complexity increases. The other way around, when the work is routine-based and straightforward, shared leadership has little or no impact on team performance (Wang et al., 2014; O'Toole et al., 2002; Pearce, 2004; Day, Gronn, & Salas, 2004; Fausing, Jeppesen, Joensson, Lewandowski, & Bligh, 2013).

Table 2.0: Shared Leadership Statement table

Literature findings	References
The more complex the task, the better shared leadership will fit to the team. Shared leadership has little to no impact on team performance when team's work is routine-based and fairly straightforward.	O'Toole et al. (2002) Day et al. (2004) Fausing et al. (2013) Wang et al. (2014)
Shared leadership is more strongly related to team performance when task interdependence is high.	Seers (1996) Mathieu et al. (2001) Cox et al. (2003) Carson et al. (2007) Yukl (2010) Burke et al. (2014) Nicolaides et al. (2014) Fausing et al. (2015) Barnet & Weidenfeller (2016)
When age diversity among team members and team coordination were low, shared leadership is positively related to team performance.	Hoch et al. (2010) Barnet & Weidenfeller (2016)
Over time the relationship between shared leadership and team performance becomes weaker as team tenure increases.	Nicolaides et al. (2014) Barnet & Weidenfeller (2016)
Shared purpose (similar understandings of team's primary objectives and take steps to ensure a focus on collective goal), social support (interpersonal support whereby team members feel recognized and encouraged), and voice (involvement within the team) are the dimensions of an internal team environment needed to enable shared leadership, which has a positive effect on team effectiveness.	Carson et al. (2007) Daspit et al. (2013) Barnet & Weidenfeller (2016)

Based on the knowledge test, conclusions are drawn about the knowledge overlap with scientific findings. For each statement multiple (meta-analysis) studies are used to support these findings to represent an overall view of scientific research about shared leadership.

2.24 Shared Leadership Moderators and Mediators on Team Performance

Regardless of the increased focus on shared leadership, there are a number of unanswered questions (Nicolaides et al., 2014), particularly with regards to the shared leadership mediators and moderators in relation to team performance. Chiu et al. (2016) also found that even though the relationship between shared leadership and team performance has been researched, there are still large amounts of unsolved inconsistencies.

Nicolaides et al. (2014) found interesting results on the meta-analysis measured. Firstly, they found that shared leadership had a significant effect on team performance, more so than that of traditional leadership on team performance. In a team context, traditional leadership may lack the full range of resources to help their teams accomplish their goals, therefore indicating that shared leadership can enhance traditional leadership, which will positively affect the organisation (Nicolaides et al., 2014; Perry, Pearce & Sims, 1999). Secondly, Nicolaides et al. (2014) found team confidence to be a partial mediator illuminating the how and why shared leadership positively impacted team performance. Both Bandura (1977) and Mathieu, Maynard, Rapp and Gilson (2008) suggest that team confidence is the umbrella term for emerging self-efficacy and collective belief, which covers the investigation into the psychology of team performance.

Furthermore, team confidence mediates the effect of team performance on a traditional leader's leadership (Bass, Avolio, Jung & Berson, 2003; Nicolaides et al., 2014); and shared leadership behaviours, which satisfy team needs, increases team confidence –like setting goals, finding solutions, giving voice and team success. These multiple transmitters support the team confidence partial mediator of shared leadership on team performance so that organisational goals can be attained. Thirdly, Nicolaides et al. (2014)

found that the high interdependence moderator, which includes working closely together, coordinating and integrating actions, positively affects team performance.

D'Innocenzo et al. (2016) recognised interdependence in task-driven interaction, goal setting and outcomes. Interdependence demands high levels of distributed expertise, coordination, interaction and guidance (Wageman, 1995), and requires an increase of leadership behaviour, which augments the impact of team performance on the organisation (Nicolaides et al., 2014; Zaccaro et al., 2001). Fourthly, Nicolaides et al. (2014), supported by (D'Innocenzo et al., 2016), found that team size was not a significant overall moderator. Statistically, researchers have measured team size to be a nuisance variable (Pearce & Conger, 2003) as both large and small teams have benefits depending on the circumstances. Finally, Nicolaides et al. (2014) found that as the team tenure moderator increased so shared leadership validities decreased, and reasons for this were potential power struggles, rigidity, conflict and team member change. Team tenure has the ability to negatively distress the organisation.

Shared leadership influences team performance indirectly through the positive affective tone moderator, which positively impacts team performance (Hmieleski, Cole & Baron, 2012; Nicolaides et al., 2014). D'Innocenzo et al. (2016) examined shared resolution, common purpose and opinion moderators within the team. They found that collective goals were achieved through shared purpose; emotional and psychological support through encouragement (Kirkman & Rosen, 1999); recognition and accomplishments through common purposes; and finally, increased communication through voice positively influencing the accomplishment of organisational goals.

D'Innocenzo et al. (2016) also found that as theory and measurement embrace difficulties of shared leadership, the relationship between shared leadership and team performance strengthened – particularly, social network density relationships within the team. Team members with certain characteristics like self-leadership, integrity, a trusting disposition, required skill and experience may make shared leadership easier and team performance stronger (Barnett & Weidenfeller, 2016), thereby benefitting the organisation.

Drescher et al. (2014) found that the mediating result of trust behaviour, developed over time, affected team performance positively – trust fully mediated the impact of shared leadership (Barnett & Weidenfeller, 2016). Houghton, Pearce, Manz, Courtright and Stewart (2014) found that surrendering personal power and engaging mutual trust motivates collaboration with team members and mediates the impact of shared leadership on the organisation, which in turn supports the concept of "sharing is caring" (Houghton et al., 2014). The assumption can be made that this type of "sharing is caring" environment will positively impact team performance.

Shared leadership moderator and mediator research in relationship to team performance has only begun, therefore an opportunity for further research will add value to what has already been proven.

2.25 Self-Leadership and Shared Leadership

Silver bullets for a new epoch of leadership in the twenty-first century are self-leadership and shared leadership (Pearce & Manz, 2005), no longer the top-down pressure, but a less restrictive bottom-up pressure of a well-educated employees who do not just want to work for a pay cheque. Leadership is changing in today's fast-paced, globalised environment from traditional leadership to empowering highly educated and motivating

employees to develop self-leadership and shared leadership (Houghton et al., 2012; Pearce & Manz, 2005).

The globe is plagued by a leadership disease (Pearce & Manz, 2014), which is a centralized hierarchal model of leadership, and the suggested solution is to turn the leadership model upside down. This upside-down model supports team performance. Pearce and Manz (2014) focus on two solutions: self-leadership, which encourages sheep-like followers (Neck & Manz, 2010), and shared leadership, which shows how every team member can play an valuable role in an interactive leadership development that positively impacts team performance (Bligh et al., 2006; Pearce & Conger, 2003).

Self-leadership can assist in decentralised executive leadership, however shared leadership can assist in putting checks and balances in the overall leadership system (Pearce & Manz, 2014), therefore being more dynamic, flexible and robust. Teams are recognised as extremely interdependent and flexible. A learning platform needs to be created so that leadership change can be implemented (Pearce & Manz, 2014) including a learning philosophy, learning methods and skills and leadership processes; so that the new leadership way can be established. Some self-leadership skills and strategies to be learnt include personal evaluation, setting of goals, self-observation, self-goal-setting, practise, management and perceptual imagery (Pearce & Manz, 2005). Some shared leadership concepts to be learnt include simultaneous, ongoing and mutual influential processes within a team (Pearce & Manz, 2005). There are five factors that influence the appropriateness of self-leadership and shared leadership (Pearce & Manz, 2005), which includes perseverance, employee commitment, innovation value, independence and complexity. These five factors, developed along with the harnessing of the potential of

knowledge workers, position teams for high team performance to positively impact management.

Manz et al. (2015) suggest that both well-developed self-leadership and shared leadership will positively impact team, organisation, team performance and service. Together they can foster psychological engagement in the service process, continuous improvement and sustainability for customers. Self-leadership meets the needs of the person being served, and shared leadership meets the experience of the service process, resulting in current clients enticing future clients (Manz et al., 2015).

This study will be done in the context of private schools in Pretoria, South Africa to determine how self-leadership and shared leadership relate to team performance on various levels within the schools, including teaching, administration, management and executive staff.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter focuses on the type of research method employed during this survey; there will be emphasis on the questionnaire design, pilot test conducted and finally, the method used for data collection and data analysis. But it begins with showing the description and analysis of the research approach, followed by the research strategy, research design.

3.2 Research Approach

As reported by Bryman & Bell (2015), research approach is basically concerned with how the researcher intend to treat theory and data. From literatures, three basic types of research approaches exist that research can adopt: abductive approach, which is often adopted by researchers especially in the field of social science (Mingers, 2012), inductive approach and deductive approach (Burns & Burns, 2009; Saunders, Lewiz, & Thornhill, 2012). Deductive approach is a scientific approach often used for proposing and testing theories in the field of natural science (Saunders *et al.*, 2012). Hence, further hypotheses can be developed with a concrete basis in a particular field of research (Saunders *et al.*, 2012). Deductive research approach is basically a five steps process: hypotheses are developed to assess the relationships among two or more variables with respect to an existing theory; to establish the relationships among constructs; the hypotheses can either be accepted or rejected after it has been tested and the original theory is changed if required on the results of the study (Saunders *et al.*, 2012). In general, the quantitative research design works well with deductive approach, where quantitative data is collected

and analyzed using statistics (Bryman & Bell, 2015). Although the deductive approach allows logical analysis at the highest level for accurate evaluation of information (Burns & Burns, 2009), overlooking alternative justifications is its major drawback despite novel concepts might be proposed when using deductive approach, these would be controlled by the structure of research design (Saunders *et al.*, 2012).

On the other, the inductive approach is concerned with creating new theories with respect to the gathered and analysed data (Burns & Burns, 2009). Inductive approach aids in the discovery of social phenomena through observation and analysis of data (Burns & Burns, 2009). Following the data analysis, Inductive approach can be used to develop theory which will integrate the meanings which social science researchers attach to the phenomena in a study domain (Saunders *et al.,* 2012). Inductive research approach goes well with qualitative research design, it allows researchers to select reasonably samples of population and analyse it using different qualitative methods, taking into account a context where social phenomena take place (Saunders *et al.,* 2012). The inductive approach can be employed if there is limited literature in a research area on phenomenon and there is need for more in-depth investigation of a problem (Saunders *et al.,* 2012).

The distinction between approaches at some point overlap (Bryman & Bell, 2015), for example, findings and results of deductive approach can be applied to a larger domain of the current literature, which shows the inductive approach, meanwhile the theory developed using inductive approach could further be tested with additional data collection as well as analysis.

Thus, abductive approach is the hybrid of the two approaches both deductive and inductive used in social science research (Bryman & Bell, 2015; Saunders *et al.,* 2012).

Abductive approach can be used to discover and explain the phenomena that is different from the existing theories through creativity and imagination (Mingers, 2012). Abductive approach assists researchers to generate creative and innovative thoughts aims at innovating and generating new ideas in a research (Mingers, 2012).

Deductive approach is the most appropriate approach for this study. This choice was due the nature of the research objectives. In line with the deductive approach, the study is rooted in the existing theory of shared leadership, team performance and metric for measuring team performance and shared leadership. The concepts of shared leadership have gained quite a significant attention from the researchers in most recent years but very little in the construction industry.

3.3 Research Design

Research design can be said to be a structured process that logically connects the outlined objectives of the study to data gathering and analysis (O'Gorman & Macintosh, 2014). There are three dimensions to research design namely; exploratory, descriptive, and explanatory (O'Gorman & Macintosh, 2014; Saunders *et al.*, 2012). Exploratory research is used to conduct an in-depth investigation into a problem that has not been studied more clearly. It is employed to develop theory and propose hypothesis about new research questions where there are deficiencies in the existing knowledge (O'Gorman & Macintosh, 2014). Explanatory research is used in an attempt to connect different ideas and to understand the different reasons, cause and their effects (O'Gorman & Macintosh, 2014; Saunders *et al.*, 2012). The notion of a descriptive design is to create an exhaustive and detail picture of context, phenomena, individuals or events. It can also be combined with either exploratory or explanatory research design to yield more comprehensive

picture of a particular phenomenon (Saunders *et al.,* 2012). Descriptive research design can be used to determine the relationship between two or more phenomena (Williams, 2011).

Considering the nature of research objectives of this study, descriptive research design was employed. This research focuses on shared leadership in project teams with respect to comprehensive review of literature on shared leadership in the context of construction industry, project team performance and metrics (Key Performance Indicators) for measuring team performance. It is channeled through assessing the relationships between the independent variable (shared leadership) and dependent variable (project team performance) through the measuring metrics. Alternatively, (Bryman & Bell, 2015) outlined two types of research design based on time dimension namely, cross-sectional and longitudinal research design. Due the quantitative nature of the current research, a cross-sectional research design was adopted. It enables qualitative or quantitative data of two or more variables to be collected at a particular time to measure the nature of relationships (Bryman & Bell, 2015). The cross-sectional research design enables a researcher to find out patterns of relationship. This is suitable for this study as we will evaluate the relationships between variables (shared leadership and team members). This is applied to outline patterns of relationships between the variables. It also allows the researcher to meet the research objectives of testing the association between the independent and dependent variables using the several metrics identified.

3.4 Data Collection

Data collection is important for research study. The three major methods of data collection are: quantitative, qualitative and qua-quan/mixed (triangulation). Quantitative

method deals with numbers, qualitative method deals with words and triangulation is a mix of both methods (Saunders *et al.,* 2012). Both qualitative and quantitative methods are distinct in terms of philosophy and approach and are used to gather data and make conclusions about a specific sample, (Bryman & Bell, 2015). When dealing with countable and quantifiable data quantitative method should be employed, and in situation whereby a detail information is of essence qualitative method is more appropriate (Saunders *et al.,* 2012). The whole notion of quantitative research is to test hypotheses developed from constructs used in prior studies. Contrary to quantitative research, qualitative research is aimed at understanding the motivation of research issues, reasons for social complex phenomena and discovery of trends of opinions (Bryman & Bell, 2015). Quantitative research is incline to reason and facts, result centered, follow analytical approach and has a structured measurement procedure, while qualitative studies are process oriented, mostly focus on observation, perceptions of respondents, and assessment usually done in natural setting.

Primary data for this study was collected in the form of quantitative questionnaires in order to gain an understanding of the extent to which shared leadership influences/enhances team processes via the metrics effect identified. And also that this research aims to explore the knowledge and extend of practice of shared leadership within construction project teams. Quantitative research have four main features namely: they usually measure a relationship or hypothesis developed by researchers; structured and linear path; they operate on positivist philosophies; tangible data delivered in the form of numbers (O'Gorman & MacIntosh, 2014). The numeric data collected are used to conduct statistical analysis to examine relationship between the variables. This study

starts with a literature review that created a basis for the proposition of hypotheses and establishing a conceptual causal research model. This deductive research approach implies the application of the quantitative method (Bryman & Bell, 2015). Moreover, statistical procedures were carried out to measure the constructs for the results to be generalisable.

3.5 Literature Review

Developing a strategy to search for literature by defining the databases and search bases, keywords and terms, search parameters, and criteria to state sound and relevant sources of literature has been suggested by (Saunders *et al.,* 2012). To search for the related literature, it is deemed important to define concept and keywords (O'Gorman & MacIntosh, 2014). Thorough literature search in particular area may not necessarily captured all the existing literature in the area.

3.6 Questionnaire Design

Questionnaire is almost always used in a management research for descriptive and explanatory research, where sometimes the main purpose will be to describe the characteristics of a population at a series of time or at a fixed time to enable further comparison during analysis. Hence, the sample to be used must be actual representative and be accurate as possible and might require a researcher to create a linkage to earlier research. Explanatory research is known to need data to test a theory or theories which mean therefore that in relation description of the research questionnaire design should include questions which aims to address the theory under test to identify the variables that involved (Saunders, Lewis & Thornhill 2007).

The questionnaire for this study was divided into three segments. The first segment focused on general information about the respondent. The second segment focused mainly on exploring the team members understanding of shared leadership. Questions that revolves round the ideas of shared leadership, the assignment of roles within the teams, decision-making, sharing of task. These variables include opinion and behavioral variable. The five-point Likert-type scales were fixed on the extremes of 1 (not important) to 5 (extremely important) to measure the importance of shared leadership dimension and 1 (strongly disagree) to 5 (strongly agree).

The third segment was about the measure of performance within the teams. This was based on the two identified performance variables namely; Team participation/coordination and work outcome. Questions were designed to ascertain the team performance based on outcomes of assigned task, timeline for completion of task, member contribution, and commitment to team task, external impact of project manager on performance. These variables also represent the opinion and behavioral variable of the questionnaire design. The questions are 9 in total, and they are also in likert scale form of 1 (not important) to 5 (extremely important) to measure the importance of shared leadership dimension and 1 (strongly disagree) to 5 (strongly agree).

3.6.1 Validity of Research Instruments

The validity of a research instrument is when it truly measures what it is supposed to measure and when data is gathered via it precisely represents the opinion of the participants as (Creswell, 2012). Validity determines whether the research accurately measures what it was planned to measure or how accurately the research results are. Validity of research tools was confirmed by means of pilot study to help fine-tuned the

instruments. This ensured that the directions are clear and all potential answers to a question were recorded.

3.7 Pilot Testing

Pilot testing was conducted to examine and refine questionnaire so that respondents will have no problem in answering and understanding the questions in order to avoid discrepancies and confusion. Therefore, pilot testing of the questionnaire prior to data collection was conducted (Saunders, Lewis &Thornhill 2007). Pilot testing was done by initially giving copies of the questionnaire to some project team members. The team members were purposively selected.

3.8 Population

Research population refers to the collective term used to describe the total quantity of a thing (or cases) which are the subject of a study (Williams, 2011). So, population consist of certain types of objects, organisations, people or even events. The main objective of a study population is to define the scope of the proposed study (Olufemi, 2007). Construction industry practitioners were the targeted population for this study particularly the Project Managers, Architects, Builders, Engineers and Quantity Surveyors (QS) for the main survey to address objectives iii & iv. According to Architects Registration Council of Nigeria (ARCON) report 2017, there are about 3,651 registered architects in the country. Council of Registered Builders of Nigeria (CORBON) in there 2018 report has 2,259 registered members. Also, Council for the Regulation of Engineering in Nigeria (COREN) there are 42,835 registered engineers in the country. The Quantity Surveyors Registration Board of Nigeria as at 2019 has 3,591 registered members. The construction professionals were drawn from both consulting firms, construction organisations firms.

3.9 Sample, Sampling Frame, & Sample Size

A sample is a portion of the population that is a part of a whole (population) while the method used in determining or selecting the sample is called sampling. Due to the fact that it is not possible to survey an entire population for practical and cost reasons, a subset or sample of the population is usually considered.

Study sampling is used in a situation when it is not completely feasible to collect and analyse data from an entire chosen population in a research used (Saunders *et al.*, 2012).

This usually arises in the case of schedule and budget constraints. Sampling techniques are of two types: probability sampling and non-probability sampling. In probability sampling, a sample is selected randomly to represent the total population, while in non-probability sampling one includes a sample with specific features related to the study but conclusions about the overall population cannot be drawn (O'Gorman & MacIntosh, 2014). Due to cross sectional nature of this research non-probability sampling techniques was employed. To this end, purposive as well as snowball samplings are more suitable for data collection for this study. Purposive sampling allows the researcher to judge and choose respondents that were working in construction project teams and thus were most likely to answer the research questions and to satisfy the objectives of the research (Saunders *et al.,* 2012). Snowball sampling was also applied in a situation whereby only one or two people were known from construction project team and they were asked to administer the survey to other members. Bias will be a limitation to snowball sampling as the participants have the tendency to go for other respondents who share similar characteristics with them (Saunders *et al.*,2012). For the purpose of data collection, there are two procedure of administering questionnaires: self-administered or researcher-administered (O'Gorman & MacIntosh, 2014). Self-administered questionnaires are usually answered by the participants themselves, while researcher-administered questionnaires answers were recorded by the researcher (Saunders *et al.,* 2012). Self-administered questionnaires were adopted for this research because it does not allow the researcher to influence the respondent to cause bias (O'Gorman & MacIntosh, 2014).

According to Kumar (2014) sampling frame is a list or other device used to define a researcher's population of interest. The sampling frame defines a set of elements from

which a researcher can select a sample of the target population. This is usually relevant in order to ensure an optimum sample size is obtained, which will adequately represent the whole population from which the sample will be drawn. The relevant regulatory bodies indicated that some of the professionals may have moved to other countries, may be dead or may have become professionally inactive; and may thus not be reachable. The sampling frame of active professionals were further obtained and are shown in Table 3.1.

Table 3.1: Population and Sampling Frame

S/N	Professional	Population	Sampling Frame
01	Architects	3,651	3,286
02	Builders	2,259	2,033
03	Engineers	42,835	38,597
04	Quantity Surveyors	3,591	3,232
	Total	**52,336**	**47,148**

3.10 Sample Size

The sample size of each research seeks to reduce the target population to a manageable and meaningful size without losing the traits and characteristics of the whole population. The sample of a study may be the same as the population under investigation in situations where members of the population are very rare. However, in situations where members of the population under investigation are common, it becomes imperative to compute a sample of the population to be included in the survey without biasing the study's findings (Mathers, Fox and Hunn, 2009).

For the survey involving project team members, it was clear from the survey population stated earlier that the project team members (practitioners) are known, except of course

that of the project manager. Hence, there was need to determine a sample that was representative of their populations.

The sample size for this research was deduced by using Yamane (1986)'s formula for calculating sample size i.e.;

$$n = \frac{N}{1+N(e)^2} \quad \text{...} (1)$$

Where: n = required sample size, N = the population size, e = level of precision (0.18).

Israel (1992) indicated that for every confidence level selected, a precision level of 3-20% is sufficient enough to determine its sample size. Muth (2006) corroborated that precision level of 20% be used for large populations. The precision levels of 18% was adopted for the four population groups (Architects, Builders, Engineers and Quantity Surveyors). The sampling frame of active professionals and computed sample sizes are shown in Table 3.2.

Table 3.2: Sample Frame and Sample Size

S/N	Professional	Sampling Frame	Sampling Size
01	Architects	3,286	31
02	Builders	2,033	31
03	Engineers	38,597	31
04	Quantity Surveyors	3,232	31
	Total	**47,148**	**124**

Therefore, the total sample size required is 124. However, because Salkind (1997) recommended that "when mailing out surveys or questionnaires, it is pertinent to increase the sample by 20% - 50% to account for lost mail and uncooperative subjects". Thus, a total of 149 questionnaires were issued out to survey respondents instead of 124 computed as the sample size and to also cater for the number of Project Managers that were snowballed.

3.11 Data Analysis Technique

Sampling technique is a process that enables one to select elements within the said population (Saunders et al., 2012). According to Saunders et al. (2012) except during census, total coverage of the population for research purposes is not only difficult and expensive but also unnecessary. The objective of sampling is to provide a practical means of enabling the data collection and processing components of research to be carried out whilst ensuring that the sample provide a good representation of the population (Abdulahi, & Owusu-Ansah, 2014). There are different methods of sampling; O'Gorman & MacIntosh (2014) noted them thus:

1. ***Random/Probability Sampling:*** In random sampling, each element in the study population has an equal and independent chance of being selected in the sample. Therefore, the choice of each element in the sample is not influenced by other considerations such as personal preferences. According to Rugg & Petre (2007) random sampling is usually employed where the total number of populations are known to the researcher. He added that, the technique is divided into three: simple random sampling (SRS), stratified random sampling and cluster sampling.

2. ***Non-Random Sampling:*** is a technique where the units that are investigated are based on the judgment of the researcher. The main goal of this sampling is to focus on a particular characteristic of a population that are of interest, which will best enable you to answer your research questions. This sampling technique does not follow probability theory. It is used when the number of elements in a population is unknown or where the elements cannot be identified individually. In such circumstance, the selection of each element is dependent upon other considerations. There are several non-random sampling techniques, namely: accidental, quota, purposive, convenience, judgmental, expert and snowball sampling.

3. ***Mixed Sampling:*** This is also known as systematic sampling. It uses the characteristics of both random and non-random sampling technique. In this technique, a sample frame is first divided into a number of segments called intervals. Then, using SRS technique, an element is selected from the first interval.

In the light of the above discussion, purposive sampling was adopted in selecting the relevant project team members, taking into considerations the likelihood that not all the practitioners will be experienced enough to provide reliable answers to the questions raised in the questionnaire.

3.12 Data Analysis Technique Used

Data obtained are analysed and presented using descriptive statistics which comprises the use of frequencies, percentages, and mean. The software used was the statistical package for social sciences (SPSS).

However, the analysis was split into two parts basically to be able to address the research objectives which are about shared leadership and team performance based on the responses of the individual within the teams. Therefore, this implies that the analysis was done based on the perception about shared leadership and the purported team performance impact. Kendall tau B Correlation was used to examine the associational relationship of share leadership with performance.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter represents the outcome of the study, on the foundation of the methodology already elaborately discussed in chapter three. The chapter opens up with a clear description of participants, data analysis and discussions of findings. Data have been analysed and presented first in the form of descriptive statistics followed by inferential with interpretation of correlation of the constructs. This section is presented with respect to the objectives of the research work.

4.2 Questionnaire Response Rate

Table 4.1 shows that out of 124 questionnaires distributed to various respondence (professionals), 87 representing 73.73% of the total questionnaires were returned and found appropriate for analysis. Moser & Kalton (2017) assert that result of a survey could be considered significant if the response rate is not lower than 30-40%. In view of this, the 73.73% response was considered adequate.

Table 4.1: Questionnaire Response Rate

Questionnaires	Frequency	Percentage
Returned	87	70.16
Not-Returned	37	29.84
Total	**124**	**100**

Source: (Field Survey, 2019)

4.3 Profile of the Participant

The questionnaire was categorised in three sections. Section A (General Information) considered the profiles of the respondents' and that of their various organisations in terms of type of organisations, year of experience, number of team work they have participated in, size and nature of the project, and status of the project. These are presented as follows:

4.3.1 Profession of Team Members

Table 4.2: Profession and Service rendered by Team Member

Profession	Frequency	Percentage	Total Percentage
Project Manager	7	8.05	8.05
Engineers	9	10.34	18.39
Architect	23	26.44	44.83
Builders	17	19.54	64.37
Quantity Surveyor	31	35.63	100
Total	**87**	**100.0**	

Source: (Field Survey, 2019)

The results of the study as presented in Table 4.2 depicts that five (5) portfolios in construction project team members were recognised in the study. These includes Architect, Builders, Engineers, Project Manager, and Quantity Surveyor. The results, however, show that only (7) 8.05 percent of the team members were Project Managers. The highest proportion of the (31) 35.63 percent were Quantity Surveyors followed by Architects who were 23, representing 26.44%, Builders who were 17 representing 19.54 percent and Engineers were 9 representing 10.34% of the overall respondents.

4.3.2 Distribution of respondents' years of Experience

Table 4.3: Distribution of respondents' years of Experience

Experience	Frequency	Percent	Cumulative Percent
Below 5 years	33	37.9	37.9
6-10 years	33	37.9	75.9
11-16 years	10	11.5	87.4
Above 20 years	11	12.6	100.0
Total	**87**	**100.0**	

Source: (Field Survey, 2019)

Respondents were asked common questions concerning their experience while working in teams and recent work situations. When enquired about total team experience, some respondents reported to have below and between 6 to 10 years of experience working in design teams respectively, representing both 37.9 percent on each category, followed by 11.5 percent who work between 11-16 years in such settings (as shown in table 4.5). Also, 12.6 percent of the respondents have above 20 years of experience working in team

4.3.2 Number of Team Work Participation

Table 4.4: Distribution of Number of Team Work Participation

Number of Team	Frequency	Percent	Cumulative Percent
1-2	19	21.8	21.8
3-4	21	24.1	46.0
Above 4	47	54.0	100.0
Total	87	100.0	

Source: (Field Survey, 2019)

The number of team participation categories included in the study and the questionnaire ranged from "1" to "Above 4". As it can be seen from table 4.3, the majority, 54.0 percent, of the respondents participated in team above 4. In addition, a total of 24.1 percent is represented respondent with participation in a team of between 3-4 members. 21.8 percent of the respondents participated in team numbering between 1-2.

4.3.4 Sizes of Project Team

Table 4.5: Distribution of Size of Project Team

Sizes	**Frequency**	**Percent**	**Cumulative Percent**
1-2	10	11.5	11.5
3-4	25	28.7	40.2
5-6	18	20.7	60.9
Above 6	34	39.1	100.0
Total	**87**	**100.0**	

Source: (Field Survey, 2019)

Table 4.4 depicts the respondents' size of team, (34) 39.1 percent of the respondents have been in team above 6 members, (25) 28.7 percent were in team between 3-4 members size, (18) 20.7 and (10) 11.5 percent in team between 5-6 and 1-2 respectively.

4.3.5 Project Size of Respondents

Table 4.6: Distribution of respondents' Project Size

Size of Project	Frequency	Percent	Cumulative Percent
Small	10	11.5	11.5
Medium	37	42.5	54.0
Large	32	36.8	90.8
Very Large	8	9.2	100.0
Total	**87**	**100.0**	

Source: (Field Survey, 2019)

The results of the study as presented in Table 4.5 show the size of project the respondents worked in. The results show that only (10) 11.5% of the respondents worked in small projects. (37) 42.5% of the respondents worked in medium project, (32) 36.8 percent worked on large projects and (8) 9.2 percent of the respondents worked in very large projects.

4.3.5 Ownership of Project

Table 4.7: Distribution of Respondents' Ownership of Project

Ownership	Frequency	Percent	Cumulative Percent
Public	53	60.9	60.9
Private	34	39.1	100.0
Total	87	100.0	

Source: (Field Survey, 2019)

The results of the study as presented in Table 4.6 show the two distinct ownership of projects generally. The results showed that only (53) 60.9 percent of the project which the respondents participated in are public owned while (34) 39.1 percent are privately owned.

4.3.6 Nature of Projects

Table 4.8: Distribution of The Nature of Projects

Nature of Project	Frequency	Percent	Cumulative Percent
Building	84	96.6	96.6
Engineering	3	3.4	100.0
Total	87	100.0	

Source: (Field Survey, 2019)

Table 4.7 show that (84) representing 96.6 percent of the respondents have engaged in Building projects and just about (3) representing 3.4 percent of the respondents have engaged in Engineering projects.

4.3.7 Status of Respondent's Project

Table 4.9: Distribution of respondents' Project Status

Project Status	Frequency	Percentage	Total Percentage
Completed	55	63.2	63.2
On-going	29	33.3	96.6
Suspended	3	3.4	100
Total	141	100.0	

Source: (Field Survey, 2019)

Table 4.10 show the respondents' project status, (55) 63.2 percent of the overall respondents participated in projects which were completed and (29) 33.3 percent of the respondents participated in project which were still on-going and (3) 3.4 percent of the respondents participated in project that were suspended.

4.4 Analysis of Team's Members Perceptions on Shared Leadership

The descriptive statistics of the responses on the perspective of shared leadership within teams (by team members) in section B of the questionnaire, were obtained from the 87 team members who have worked and/or are still working in construction project teams. Frequency and percentage breakdown of the responses on each statement pertaining to shared leadership was conducted to determine whether the 87 project team members agreed or disagreed with the importance of each statement in the survey constructs. Prior to the frequency and percentage breakdown, the responses of the "Strongly Disagree" and "Disagree" scales were combined as one category of "Not Important" while the responses of "Strongly Agree" and "Agree" scales were combined as one category of "Important". Converting the responses in this way will make it easier to analyse if the proportion of important is statistically different from the proportion of not important.

The questions under this segment were Ten altogether, which critically examine the team members knowledge of shared leadership and the way it is being practiced within the team. There was conflicting results from team members to team members. However, the outcome of the variation was interesting in course of the analysis. Analysis of question from this section was answered based on 5 point likert scale as earlier explained from which have the options of Strongly Disagree to Strongly Agree. The scale can be seen in the questionnaire as an appendix.

4.4.1 Team Members Perceptions on Shared Leadership

Table 4.10: Respondents' Perception of Shared Leadership

Shared Leadership	Frequency	Percentage	Cumulative Percentage
Strongly Disagree	98	11.26	11.26
Disagree	196	22.53	33.79
Averagely Agree	0	0.00	33.79
Agree	265	30.46	64.25
Strongly Agree	311	35.75	100.00
TOTAL	**870**	**100.00**	

Source: (Field Survey, 2019)

From table 4.10, it was observed that the responding team members have a good comprehension of shared leadership and its workings within their teams. One of the reasons (I believe) for this was due to the definition of shared leadership given to the respondents. This served as a basis for their succinct comprehension and perspective of it.

311 representing the major junk of the shared leadership constructs with 35.75 percent strongly showed the positive affirmation to the practice of shared leadership within the project team(s). 265 representing yet another major junk of the shared leadership constructs with 30.46 percent agreed to the affirmation of the practice of shared leadership within the project team(s). 196 of the shared leadership constructs representing 22.53 percent disagree to the practice of shared leadership within the project team(s) while 98 of the shared leadership constructs representing 11.26 percent strongly disagree to the practice of shared leadership within the project team(s).

The above analysis particularly answers the second research objective that was to ascertain the team member's knowledge of shared leadership. Therefore, it can be inferred that project Team members have practiced and understand Shared leadership. The reason of which may be that practitioners may have been involved in more team works in the past.

4.2 Extent of Practice of Shared leadership with Teams

In order to get answers to the third research objective, several questions were asked the respondents to examine the extent to which shared leadership in being practice within teams. In that vein, Ten (10) variables were used to examine the practice within the teams. These questions were along the lines of; Individual roles within the teams, the leadership role within the teams, task sharing, decision-making, level of collaboration, member's opinion, problem-solving, help to members, members' perception. However, the questions were phrased and simplified to depicts scenarios to aid in clear comprehension on shared leadership and the extend of practice within the team.

Table 4.11: Extent of Practice of Shared leadership with Teams

Items (Variables)	N	Mean	Std. Deviation
Task are efficiently carried out by team members **(Task Efficiency)**	87	4.14	.942
Leadership responsibilities is shared among team members when necessary	87	3.71	1.130
Leadership responsibilities is sometimes vested in only a single member of the team	87	3.51	1.256
When members leading the team leaves, the team's progress is unaffected	87	3.29	1.160
Each team member is called upon at some point to provide guidance and directive to the team	87	3.15	1.225
Every member of the team has the ability to build confidence in others **(Collaborating Influence)**	87	4.03	.982
Every member is given the privilege to enforce team norms and facilitating team learning	87	3.99	.800
The team leader is selected based on the peculiarity of task the team is handling at any moment	86	3.94	1.022
Clear expectation of new responsibilities is communicated to team members in other to regulate members behavior **(Communication)**	87	4.29	.834
The leadership roles available in my group result from the needs arising from our goals **(Goal Oriented)**	87	4.16	1.066
Valid N (listwise)	**87**		

Source: (Field Survey, 2019)

Table 4.12 show the result of the descriptive analysis of shared leadership practice within the team members. However, it can be observed that there is higher value for communication and task effeciency on the opinion of the team members with mean value of 4.29 and 4.14 respectively. Meanwhile the problematic area in the practice of shared leadership within the teams are provision of guidiance by team members, the absence of team leadership which have the mean values of 3.15 and 3.51 respectively

Table 4.12: Descriptive Analysis of Team Performance

Description	N	Mean	Std. Deviation
Team members take personal responsibility for the effectiveness of our team	87	3.97	.637
Team members appreciate one another's unique capabilities	87	3.84	.987
When an individual's role changes, an intentional effort is made to clarify it for everyone on the team (**Clarity of Roles**)	87	**4.25**	.750
Our team has a meaningful shared purpose (**Shared Purpose**)	87	**4.18**	.971
We always ask ourselves, "How can we do better tomorrow what we did today?"	87	3.97	.813
We consistently produce strong measurable results (**Strong Measurable Result**)	87	**4.31**	.867
Everyone values what each member contributes to the team (**Contribution**)	87	**4.16**	.847
Team members frequently go beyond what is required and do not hesitate to take initiative (**Proactiveness**)	87	**4.18**	.971
Team members take personal responsibility for the effectiveness of our team	87	3.97	.637
Team members seek and give each other constructive feedback	87	**4.18**	.971
Valid N (listwise)	**87**		

The Table 4.11 above show the result of the descriptive analysis of Team Performance within the team members. However, it can be observed that there is higher value for Strong Measurable result (4.31) showing that team performance is heightneed when there are strong measurable result. Strong measurable results are essential for evaluting progress in any situation. When a goal is specific and measurable, it is more likely to be achieved.

Clarity of Roles also comes high at 4.28 indicating that a clear and supported vision is important, but if the roles of team members are not clear, it leads to conflict in the team (Gladstein, 1984), and it can confuse and frustrate team members. Research on roles in organizations has primarily focused on three role perceptions: role clarity, role conflict, and role ambiguity (Esper et al., 2008). Role ambiguity refers to a lack of clear information about a particular role, whereas role conflict has been defined as incongruence in role expectations between a role incumbent and role senders (Kahn, Wolfe, Quinn, Snoek, and Rosenthal, 1964). Role clarity has simply been referred to as a lack of role ambiguity (Rizzo, House, and Lirtzman, 1970), meaning that an individual team member has a clear understanding of his or her task and has clear information associated with a particular role in the team (Bray and Brawley, 2002). As with vision, within the team, each team member should have a clear understanding of his/her role and how that role interacts with other team roles. The understanding of each other's roles will affect the attitudes of team members towards the team. This increases cohesiveness and collective orientation, promotes autonomy, ownership, job satisfaction, self-accountability and commitment towards the project, organization and team success (Braun and Avital, 2007).

From the above table, it was also seen that Shared Purpose, Proactiveness and Giving of constructive feedback has equal effect on team performance (4.18).

Based on the respondents practice of shared leadership in teams (refer to Table 4.12) and that of Team Performance, Kendall's tau-b correlation was used to examine the associational relationship between the four (highest mean valued) shared leadership variables and all the team performance variables.

Table 4.13: Correlations of Shared Leadership and Team Performance

			Team members take personal responsibility for the effectiveness of our team	Team members appreciate one another's unique capabilities	When an individual's role changes, an intentional effort is made to clarify if for everyone on the team	Our team has a meaningful shared purpose	We always ask ourselves, "How can we do better tomorrow what we did today?"	We consistently produce strong measurable results	Everyone values what each member contributes to the team	Team members frequently go beyond what is required and do not hesitate to take initiative	Team members take personal responsibility for the effectiveness of our team	Team members seek and give each other constructive feedback
Kendall's tau_b	Task are efficiently carried out by team members	Correlation Coefficient	.393**	.063	.264**	.389**	.473**	.209*	.288**	.389**	.393**	.389**
		Sig. (2-tailed)	.000	.497	.006	.000	.000	.030	.002	.000	.000	.000
		N	87	87	87	87	87	87	87	87	87	87
	Leadership responsibilities is shared among team members when necessary	Correlation Coefficient	.151	.142	-.148	.118	.045	.085	-.025	.118	.151	.118
		Sig. (2-tailed)	.111	.119	.118	.204	.628	.366	.785	.204	.111	.204
		N	87	87	87	87	87	87	87	87	87	87
	Every member of the team has the ability to build confidence in others	Correlation Coefficient	.249*	.104	.387**	.300**	.280**	.198*	.353**	.300**	.249*	.300**
		Sig. (2-tailed)	.010	.262	.000	.002	.003	.038	.000	.002	.010	.002
		N	87	87	87	87	87	87	87	87	87	87
	Clear expectation of new responsibilities is communicated to team members in other to regulate members behaviour	Correlation Coefficient	.235*	0.000	.406**	.445**	.437**	.401**	.259**	.445**	.235*	.445**
		Sig. (2-tailed)	.017	1.000	.000	.000	.000	.000	.007	.000	.017	.000
		N	87	87	87	87	87	87	87	87	87	87
	The leadership roles available in my group result from the needs arising from our goals	Correlation Coefficient	.300**	.082	.006	.330**	.351**	.162	.261**	.330**	.300**	.330**
		Sig. (2-tailed)	.002	.379	.954	.001	.000	.089	.006	.001	.002	.001
		N	87	87	87	87	87	87	87	87	87	87
		N	87	87	87	87	87	87	87	87	87	87

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.13.1: Correlations of Shared Leadership and Team Performance

			Team effectiveness	Unique capabilities	Role Clarification	Shared purpose	Team Improvement	Measurable results	Member contributes	Exceeding Expectations	Feedback
Kendall's tau_b	Task Efficiency***	Correlation Coefficient	.393**	.063	.264**	.389**	.473**	.209*	.288**	.389**	.389**
		Sig. (2-tailed)	.000	.497	.006	.000	.000	.030	.002	.000	.000
		N	87	87	87	87	87	87	87	87	87
	Shared Leadership responsibilities	Correlation Coefficient	.151	.142	-.148	.118	.045	.085	-.025	.118	.118
		Sig. (2-tailed)	.111	.119	.118	.204	.628	.366	.785	.204	.204
		N	87	87	87	87	87	87	87	87	87
	Collaborating Influence**	Correlation Coefficient	.249*	.104	.387**	.300**	.280**	.198*	.353**	.300**	.300**
		Sig. (2-tailed)	.010	.262	.000	.002	.003	.038	.000	.002	.002
		N	87	87	87	87	87	87	87	87	87
	Communication*	Correlation Coefficient	.235*	0.000	.406**	.445**	.437**	.401**	.259**	.445**	.445**
		Sig. (2-tailed)	.017	1.000	.000	.000	.000	.000	.007	.000	.000
		N	87	87	87	87	87	87	87	87	87
	Goal oriented Leadership****	Correlation Coefficient	.300**	.082	.006	.330**	.351**	.162	.261**	.330**	.330**
		Sig. (2-tailed)	.002	.379	.954	.001	.000	.089	.006	.001	.001
		N	87	87	87	87	87	87	87	87	87
		N	87	87	87	87	87	87	87	87	87

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

From the table above, it can be observed that;

Task Efficiency has a positive influence on the entire team performance. With the highest influence on Team Improvement (.473) and the least influence on Team members unique capabilities (.063). This goes to explain that, how well members of a team efficiently carry out tasks have a positive influence on the team performance. Task efficiency relates to performance regardless of characteristics of the team or task at hand. This can be achieved in some ways;

i. *Team Task Autonomy.* This is the degree to which the team is allowed or expected to do its own work and to manage the work of the team (Strubler & York, 2007). Task autonomy motivates effective team performance by increasing a sense of responsibility within team members (Hackman & Oldham, 1975; Spreitzer et.al, 1999).

ii. *Team Task Feedback.* Team task feedback is the extend to which a team is corresponded back on the quality of its work performed (Strubler & York, 2007). Task feedback could build internal work motivation by providing the results of work activities (Cohen et.al., Hackman & Oldham, 1975). Through efficient and effective task feedback, team members could monitor their own activities and make improvements by responding to performance situation (Cohen et.al., 1996; Spreitzer et.al, 1999)

Shared Leadership Responsibilities has the highest influence on team effectiveness (.151), followed by team members appreciating each other's unique capabilities (.142),

similar influence on Team sharing meaningful purpose, team performance exceeding expectation and feedback (.118) respectively, some significance level of influence on team improvement (.045) but has negative influence on role clarification (-.148) and member contribution (-.025). The big picture takeaway is, the more complex a team's work is, the stronger the effects of shared leadership will be. In other words, if a team is working on an incredibly difficult task, the shared leadership style will have a more significant impact on their performance and effectiveness in tackling such task. A meta-analysis found that one reason why shared leadership responsibility relates to performance is through increasing team confidence which is caused when team members feel empowered through the perceived responsibility and self-control in the context of shared leadership.

Collaborating Influence has the greatest influence on role clarification (.387) and member contribution (.358) respectively and the same level of influence on; Feedback, exceed expectation and team shared purpose (.300). Unique capabilities appear to be the least influence by shared leadership. Collaborating Influence is associated with effective coordination and communication that come forward from a shared understanding of the context and assumptions inherent to an innovation project (Chiocchio et al., 2011). For firms, it is important to understand what motivates employees to effectively collaborate in project teams.

i. Collaborating Influence amongst team members was found to increase member's productivity, motivation and determination to persevere with and/or in the face of challenges whilst working together on a given task. Work-induced tiredness

decreased, and team members showed much more of an interest in the challenges posed to them.

ii. The results also show that, even if member was "technically" working alone, the smallest perception that they were involved in a collaborative process increased their motivation levels substantially. From correspondences, team members who felt the effects of teamwork persevered on tasks 64 percent longer, compared to those who had no sense of collaboration at all.

iii. Further observation showed that, projects that encourages collaborative working were an incredible five times more likely to be high-performing. Clearly, of course, there may be large incentive to encourage teamwork and collaboration.

Communication has the highest influence across board in team performance with the greatest influence on Shared Purpose (0.445) respectively but with absolutely no influence on Unique Capabilities (0.00).

i. Result shows that, communication is important to any work team, and it is paramount to create an effective teamwork environment. Good communication can spur employee improvement, increase retention and foster better overall performance.

ii. From correspondences with respondents, 74% said the best-performing teams often experience effective and efficient communication in form of constructive feedback. That constructive feedback then further help teams execute more effectively.

iii. Result also shows that, projects that have better communication, feedback and goal-setting processes have higher team members retention, hence improving team performance than those without it.

Goal Oriented Leadership has a greater influence on Team Improvement (.351) and Shared purpose, feedback and exceeding expectation having the same level of influence (.330). Role clarification having the least influence (0.006). This is a state where team members perceived their team to have learning goals, mutual support mechanism and challenging task.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

The primary objectives of this research were to investigate how sharing leadership influence on the performance of the self-managed project team. In addition, this research aims to give recommendations on how to improve the interaction within team work in project.

Empirical result reveals the extent of shared leadership in influencing teams is more with effective communication (4.29), goal orientation, task efficiency, and collaborating influence with each other. Based on this, four observed areas of shared leadership were used to examine performance using the severity of their impact. Communication showed a higher and positive correlation for all the performance except when Team members appreciate each other's unique capabilities. This implies that with better and effective communication in a team, performance will be enhanced.

From the results, an offshoot effect shows that communication embellishes team performance and can also be heightened by the following;

i. *Developing Communication skills*. This includes active listening, self-awareness of communication style and acknowledgement of personal barriers (including inherent attitudes, values and beliefs).

ii. *Learning to ask the right questions*. The more (right) questions are ask, the more information are being drawn from, hence, mitigating the chances of

miscommunication. Asking questions is also a good way to not only clarify information but also to practice active listening.

iii. *Create Engaging Conversations*. When team members need to partake in the discussion, rather being told to do something, the team members will be enabled to refine and retain information.

iv. *Practice Self-Reflection*. Understanding not only your own communication style but also other's communication styles will minimise miscommunication. Take time to particularly understand your non-verbal reactive cues and how they might be interpreted by others.

b. *Goal Oriented* also showed a high and positive correlation for all team performance. This implies that with better and effective communication in a team, performance will be enhanced.

From a practical viewpoint, sharing leadership in a self-managed project team was observed to have a better potential on their performance (Carte et al (2006), Kocolowski 2010). Although, there is a generic need for adequate sensitization on the concept of team and shared leadership. The result from this research suggested that the project team share leadership functions such as supporting, planning etc. to a moderate extent but influence impact on performance is less. It was observed that there is more of individual feeling that is unhealthy for performance rather than team feeling.

5.2 Recommendations

1. Given that this is the first study that established the relationship between shared leadership and team performance in Nigeria's construction projects but covering

just Kaduna state, it is strongly recommended further studies be carried out covering other states and geopolitical zone in the country.

2. Other aspects of team performance can be explored like the Input and Processes, as this research only focused on Team performance outcomes within Construction projects in Nigeria.
3. A model or framework can be established in furtherance to this research showing how the moderating and/or mediator factors can make to interact between shared leadership and team performance in Construction projects in Nigeria.
4. Also, it was observed that majority of the respondents were Quantity Surveyors and Architects, therefore, other professional's influence on shared leadership will be interesting to be investigated so as to get a balanced perspective on task sharing and benefits of team work.
5. It was observed that shared leadership in self-managed team is much negatively affected by individual feeling than any other factors. Therefore, feeling factors such as emotion, trust, motivation of team members and expectation of team members need to be investigated amongst project team members to sharing leadership.
6. This research has poised a high need for team work supervision which is not uncommon in self-managed teams. Opinions suggested that there is need to ensure that team members are motivated positively towards team tasks. This suggests that there is high need to create leadership functions within teams in the area of motivation that will encourage active participation by team members.

7. Also, it can be recommended that, team building activities are very essential to create dynamics in teams in order to neutralized individual feeling that usually characterize premature team performance.

5.3 Contributions to Knowledge

The current study adds to the project management body of knowledge by incorporating shared leadership and team performance concept, especially as it pertains to Nigeria's construction industry. The findings of this study demonstrated that change in team performance as a result of shared leadership is positive. This add to the insight of shared leadership and team performance in construction projects.

REFERENCES

Abdallah, W., Goergen, M., & O'Sullivan, N. (2015). Endogeneity: How failure to correct for it can cause wrong inferences and some remedies. *British Journal of Management*.

Adair, J.E. (1989). *Great leaders*. Guildford: Talbot Adair Press.

Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. *International Journal of Project Management*, 34, 806–818.

Anantatmula, V. S. (2010). Project manager leadership role in improving project performance. Engineering Management Journal, 22(1), 13-22.

Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*.

Anwar, K. (2017). Leading Construction Project Teams: The Effectiveness of Transformational leadership in Dynamic Work Environments in Kurdistan. International Journal of Advance Engineering, Management and Science, 3 (10).

Arif, M., & Mehmood, Z. (2011). Leadership and HRM: Evaluating new leadership styles for effective human resource management.

Aroian, L. (1947). The probability function of the product of two normally distributed variables. Annals of Mathematical Statistics, 265–271.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, *17*(1), 99-120.

Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of applied psychology*, *83*(3), 377.

Bass, B. M., & Steidlmeier, P. (1999). "Ethics, character, and authentic transformational leadership behavior," *The Leadership Quarterly*, vol. 10, no. 2, pp. 181-217.

Bennis, W., & Nanus, B., (1985). Leaders: The Strategies for Taking Charge. Harper and Row, New-York.

Baker, B. N., Fisher, D., & Murphy, D. C. (1983). Project management in the public sector: success and failure patterns compared to private sector projects. Project Management Handbook, Second Edition, 920-934.

Barge, J.K. (1994). *On interlinking language games: New opportunities for group communication research". Communication Studies*, 45, 237.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of personality and social psychology, 51(6), 1173.

Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organisational culture. Public administration quarterly, 112-121.

Bass, B.M. & Riggio, R.E. (2006). *Transformational leadership* 2nd (Ed). Aufl. Mahwah.

Bass, B.M. (1990). *From Transactional to Transformational Leadership: Learning to Share the Vision*. *Organisational Dynamics*, 18, (3), 19-31.

Bass, B.M. (1998). *Transformational leadership: Industrial, military, and educational Impact.* New Jersey: Lawrence Erlbaum.

Bennis, W. & Nanus, B. (1997). *Leaders: The Strategies for Taking Charge,* New York: Harper & Rower.

Biberman, J. & Whitty, M. (1997). A postmodern spiritual future for work.*Journal of Organisational Change*, vol. 10 (2) 130-138.

Blake, R. & Mouton, J. (1978). *The new management grid.* Houston Gulf Publishing Co.

Blake, R., & Mouton, J. (1964). The managerial grid: The key to leadership excellence.

Blanchard, K.H. & Hersey, P. (1996). Life-cycle theory of leadership. *Training & Development*, vol. 50 (1) 42-47.

Boehnke, K., DiStefano, A.C., DiStefano, J.J. & Bontis, N. (1999). Managing to produce: Leadership for Extraordinary Performance. *IEEE Engineering Management*
Review, 27 (1) 32-37.

Bolden, R. & Gosling, J. (2006). *Leadership Competencies: Time to Change the Tune? Leadership*, (2) 147-163.

Bradley, J., White, B. J., & Mennecke, B. E. (2003). Teams and tasks: A temporal framework for the effects of interpersonal interventions on team performance. Small Group Research, 34(3), 353-387.

Braun, S., Peus, C., Weisweiler, S., Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: a multilevel mediation model of trust. Leadership Quartely. 24 (1), 270–283.

Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. Journal of personality and social psychology, 47(6), 1191.

Brooks, J.S. & Normore, A.H. (2010). *Educational leadership and globalization: Literacy for a local perspective*. *Educational Policy*, 24 (1) 52-82.

Bryman, A. (1992). *Charisma and Leadership in Organisations*. London: Sage.

Bryman, A., & Bell, E. (2015). Business research methods.

Burns, J.M. (1978). Leadership. New York: Harper & Row.

Burns, R. P., & Burns, R. (2009). Business research methods and statistics using SPSS. London: Sage Publications.

Burns, T.E. & Stalker, G.M. (1961). *The management of innovation.* University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research
Reference in Entrepreneurship.

Cacioppe, R. (1997). Leadership moment by moment. *Leadership and Organisation Development Journal*, 18 (7) 335–346.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2016). Shared leadership in teams: An investigation of antecedent conditions and performance. *IEEE Engineering Management Review*, *44*(3), 86-103.

Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. Personnel psychology, 46(4), 823-847.

Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. Personnel psychology, 49(2), 429-452.

Carson, C. (1987). *Martin Luther King, Jr: Charismatic Leadership in a Mass Struggle. The Journal of American ,, History,* 74 448-454.

Carter, M.Z., Armenakis, A.A., Field, H. S. & Mossholder, K. W. (2013). Transformational leadership, relationship quality, and employee performance during continuous incremental organisational change, Journal of Organisational Behaviour, 34 (7) 942-958.

Carte, T. A., Chidambaram, L., & Becker, A. (2006). Emergent leadership in self-managed virtual teams. *Group Decision and Negotiation*, *15*(4), 323-343.

Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of management*, *23*(3), 239-290.

Chamorro-Premuzic, T. (2007). *Personality and Individual Differences (Bps Textbooks in Psychology)*. Grand Rapids: Blackwell Limited.

Cherry, Kendra, (2010). *What is Laissez-Faire Leadership?* [Retrieved on June 2017].AvailableFrom:<http://psychology.about.com/od/leadership/f/laissezfaireleadership.htm.

Chin, W. (2010). How to write up and report PLS analyses. Handbook of partial least squares: Concepts, methods and application. New York, NY: Springer.

Chiocchio, F., Grenier, S., O'Neill, T. A., Savaria, K., & Willms, J. D. (2012). The effects of collaboration on performance: A multilevel validation in project teams. International Journal of Project Organisation and Management, 4(1), 1-37.

Chou, H. W., Lin, Y. H., Chang, H. H. & Chaung, W. W. (2013). Transformational Leadership and Team Performance. SAGE Open.

Choudhary, A.J., Akhtar, S. A. & Zaheer, A. (2013). Impact of transformational and servant leadership on organisational performance: a comparative analysis, Journal of Business Ethics, 116 (2), 433-440.

Ciulla, J.B. (2004). Ethics: The Heart of Leadership. 2nd (Ed). London: Praeger.

Ciulla, J.B. (2005). The state of leadership ethics and the work that lies before us. Business Ethics: A European Review, 14 (4) 323-335.

Cleland, D., & King, R. (1983). System Analysis and Project. Management (Tokyo: McGraw-Hill Kogakusha, 1975), 8.

Collins J. (2005). Level 5 Leadership: The Triumph of Humility and Fierce Resolve. *Harvard Business Review*, 83 (7) 136-146.

Cox, J.F., Pearce, C.L., & Perry, M.L., (2003). Toward a model of shared leadership and distributed influence in the innovation process: how shared leadership can enhance new product development team dynamics and effectiveness. In: Pearce, C.L., Conger, J.A. (Eds.), Shared Leadership. SAGE Publications Inc, USA, Thousand Oaks, CA, USA, pp. 48–76

Crevani, L., Lindgren, M., & Packendorff, J., (2010). Leadership, not leaders: on the study of leadership as practices and interactions. Scand. J. Manag. 26 (1), 77–86

Ceri-Booms, M., Curşeu, P., & Oerlemans, L., (2017). Task and person-focused leadership behaviors and team performance: a meta-analysis. Hum. Resource. Manage. Rev. 27 (1), 178–192

Cox, J. F., Pearce, C. L., and Perry, M. L., (2002). "Toward a model of shared leadership and distributed influence in the innovation process: How shared leadership can enhance

new product development team dynamics and effectiveness," *Shared Leadership: Reframing the Hows and Whys of Leadership*, vol. 4876.

Conger, I.A. & Kanungo, R. (1998). Charismatic leadership in organisations. San Francisco: Jossey-Bass.

Conger, J.A. (1991). Inspiring others: The language of leadership". The Executive, 5 (1) 31-45.

Creswell, J. (2012). Educational research: Planning, conducting and evaluating quantitative and qualitative research. Prentice Hill: Upper Saddle River.

Creswell, J. (2003). Research design: Qualitative, quantitative and mixed methods approaches (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Day, D. V., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *The leadership quarterly*, *15*(6), 857-880.

Daft, R.L. (2003). *Management* (6th Ed.). Mason, OH: Thomson South-Western.

Dansereau, F., Graen, G. & Haga, W. (1975). A vertical dyad approach to leadership within formal organisations. *Organisational Behaviour and Human Performance*, 13 46-78.

Dasgupta, N., DeSteno, D., Williams, L. A., & Hunsinger, M. (2009). Fanning the flames of prejudice: The influence of specific incidental emotions on implicit prejudice. Emotion, 9(4), 585.

De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: a meta-analysis. Journal of applied Psychology, 88(4), 741.

De Dreu, C. K., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. Journal of applied Psychology, 86(6), 1191.

De Wit, F. R., Greer, L. L., & Jehn, K. A. (2012). The paradox of intragroup conflict: a meta-analysis. Journal of Applied Psychology, 97(2), 360.

Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. The Leadership Quarterly, 25(1), 36-62.

Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. Journal of organisational change management, 17(2), 177-193.

Donelly, J. H., Ivancevich, J. M., & Gibson, J. L. (1985). Organisations: Behaviour, structure, processes.

Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. Journal of Organisational Behaviour, 38(3), 439-458.

Dotlich, D.L. & Cairo, P.C. (2003). *Why CEOs fail: The eleven behaviors that can derail your climb to the top - and how to manage them*. San Francisco: Jossey Bass.

Dulewicz, V. & Higgs, M. (2005). Assessing leadership styles and organisational context. *Journal of Managerial Psychology,* 20 (2) 105-123.

Eberhardt, J. L., Davies, P. G., Purdie-Vaughns, V. J., & Johnson, S. L. (2006). Looking deathworthy: Perceived stereotypicality of Black defendants predicts capital-sentencing outcomes. Psychological Science, 17(5), 383-386.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, *44*(2), 350-383.

Efron, B., & Tibshirani, R. (1993). An introduction to the bootstrap (monographs on statistics and applied probability. New York, NY: Chapman & Hall.

Easterby-Smith, J. Burgoyne & L. Araujo Organisational Learning and the Learning Organisation (London: Sage) pp. 1-23.

Esan, EO; Okafor, RO (1995). Testing statistical hypotheses. In: Basic Statistical Methods. JAS publishers, Lagos. pp. 116-155.

Fabrigar, L. R., Petty, R. E., Smith, S. M., & Crites Jr, S. L. (2006). Understanding knowledge effects on attitude-behavior consistency: The role of relevance, complexity, and amount of knowledge. Journal of Personality and Social Psychology, 90(4), 556.

Farh, J., Liang, J., Chou, L. & Cheng. B. (2008). *Leadership and Management in China Philosophies, Theories, and Practices. New Jersey:* Cambridge University Press.

Fiedler, F.E. & Chemers, M.M. (1974). *Leadership and Effective Management. Glenview,* IL: Scott, Foresman and Co.

Fiedler, F.E. & Garcia, J.E. (1987). New approaches to effective leadership: Cognitive resources and organisational performance. John Wiley & Sons.

Fiedler, F.E. (1967). *A theory of leadership effectiveness.* NY: McGraw-Hill.

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1).

Galton, F. (1869). *Hereditary Genius*. New York: Appleton.

Gardner, J.W. (1987). Leadership papers 5: The moral aspect of leadership. Washington, DC: Independent Sector.

Gefen, D., Straub, D., & Gorse, C. (2004). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems.

Geister, S., Konradt, U., & Hertel, G. (2006). Effects of process feedback on motivation, satisfaction, and performance in virtual teams. Small group research, 37(5), 459-489.

Gemmill, G. & Oakley, J. (1992). *Leadership: An Alienating Social Myth? Human Relations*, 45 (2) 113-129.

Gilson, L. L., & Shalley, C. E. (2004). A little creativity goes a long way: An examination of teams' engagement in creative processes. Journal of Management, 30: 453-470.

Gilson, L. L., Mathieu, J. E., Shalley, C. E., & Ruddy, T. M. (2005). Creativity and standardization: Complementary or conflicting drivers of team effectiveness. Academy of Management Journal, 48: 521-531.

Gist, M. E., Locke, E. A.,& Taylor, M. S. (1987). Organisational behaviour: Group structure, process, and effectiveness. Journal of Management, 13(2), 237-257.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. Administrative science quarterly, 499-517.

Goffman, E. (1961). *Asylums*. New York: Anchor Books.

Goleman, D. (1998). *Working with emotional intelligence.* Random House Digital, Inc.

Goodman, L. (1960). On the exact variance of products. Journal of the American Statistical Association.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, *17*(S2), 109-122

Graen, G.B. & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years:Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6 (2) 219-247.

Greenleaf, R.K. (1970). *The leader as servant*. San Francisco.

Greer, L. L., Jehn, K. A., & Mannix, E. A. (2008). Conflict transformation: A longitudinal investigation of the relationships between different types of intragroup conflict and the moderating role of conflict resolution. Small Group Research, 39(3), 278-302.

Grove, S. K., Burns, N., & Gray, J. (2014). Understanding nursing research: Building an evidence-based practice. Elsevier Health Sciences.

Gundersen, G., Hellesøy, B.T., Raeder, S. (2012). Leading international project teams the effectiveness of transformational leadership in dynamic work environments. Journal of Leadership in Organisational Studies, 19 (1), 46–57.

Guzzo, R. A., & Shea, G. P. (1992). Group performance and intergroup relations in organisations.

Hackman, J. R. (1983). A normative model of work team effectiveness (No. TR-2). Office of naval research Arlington VA.

Hackman, J. R. (1987). The design of work teams. In JW Lorsch (Ed.), Handbook of Organizational Behavior, Englewood Cliffs, NJ: Prentice-Hall.

Hackman, J. R., & Morris, C. G. (1975). Group tasks, group interaction processes, and group performance effectiveness: A review and proposed integration. Advances in experimental social psychology, Vol. 8: 45-99. New York: Academic Press.

Hackman, M.Z. & Johnson, C.E. (2009). *Leadership: A Communication Perspective*. Long Groove IL: Waveland Press, Inc.

Hair, J. ., Hut, G. M. ., Ringle, C., & Sarstedt, M. (2014). Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). London England: SAGE Publications.

Hair, J. F., Hut, G. T. M., Ringle, C. M., & Sarstedt, M. A. (2014). Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).

Hamm, J. (2011). *Unusually excellent: The necessary nine skills required for the practice of great leadership.* San Francisco: Jossey Boss.

Han, S. H., Seo, G., Yoon, S. W., & Yoon, D.Y. (2016). Transformational leadership and knowledge sharing. Journal of Workplace Learning, 28, 130–149.

Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. Academy of Management journal, 49(2), 305-325.

Haslam, S.A., Reicher, S.D. & Platow, M.J. (2011). The new Psychology of Leadership. East Sussex: Psychology Press.

Hauptman, O., & Hirji, K. K. (1996). The influence of process concurrency on project outcomes in product development: An empirical study of cross-functional teams. IEEE Transactions on Engineering Management, 43(2), 153-164.

Hay Group (2011). Building the New Leader – Leadership Challenges of the Future Revealed.

Hemphill, J.K. & Coons, A.E. (1957). *Development of the leader behaviour description questionnaire. In: R. M. Stogdill & A. E. Coons (eds.), Leader Behaviour: Its Description and Measurement. Columbus,* OH: Bureau of Business Research, Ohio State University.

Henseler, J., Dijkstra, T. ., Sarstedt, Ringle, C. ., Diamantopoulos, A., Straub, D., Alantone, R. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). Organisational Research Methods, (2), 182–209.

Herman, H. M., Huang, X., & Lam, W. (2013). Why does transformational leadership matter for employee turnover? A multi-foci social exchange perspective. *The Leadership Quarterly*, 24(5), 763-776.

Hersey, P. & Blanchard, K.H. (1999). *Leadership and the one-minute manager*. William Morrow.

Hersey, P., Blanchard, K.H. & Johnson, D.E. (1988). *Management of Organisational Behaviour*.

Hesselbein, F., & Goldsmith, M. (2006). The leader of the future 2: Visions, strategies, and practices for the new era.

Hickson, D.J., Hinings, C.R., Lee, C.A. & Schneck, R.E. (1971). A Strategic Contingencies: Theory of Intra organisational Power. *Administrative Science Quarterly*, (16) 216-229.

Higgs, M.J. (2003). Developments in leadership thinking. *Organisational Development and Leadership Journal*, 24 (5) 273-284.

Hiller, N. J., Day, D. V., & Vance, R. J. (2006). Collective enactment of leadership roles and team effectiveness: A field study. The Leadership Quarterly, 17(4), 387-397.

Hilton, J. L., & Von Hippel, W. (1996). Stereotypes. Annual review of psychology, 47(1), 237-271.

Hoegl, M., & Gemuenden, H. G. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. Organisation science, 12(4), 435-449.

Hogg, M. A., Martin, R., & Weeden, K. (2003). Leader-member relations and social identity. Leadership and power: Identity processes in groups and organisations, 18-33.

House, R.J. & Mitchell, T.R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business,* 3 (4) 81–98.

House, R.J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, (16) 321-339.

Huey, J. (1994). The new post-heroic leadership‘. Fortune, 21 42-50.

Humphreys, J.H. & Einstein, W.O. (2003). Nothing new under the sun: transformational leadership from a historical perspective. *Management Decision,* 41 (1) 85-95.

Jacobs, T. O., & Jaques, E. (1990). Military executive leadership.

Jago, A.G. (1982). *Leadership: Perspectives in theory and research. Management Science*, 28, (3) 315-336.

Janicik, G. A., & Bartel, C. A. (2003). Talking about time: Effects of temporal planning and time awareness norms on group coordination and performance. Group Dynamics: Theory, Research, and Practice, 7(2), 122.

Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. Administrative science quarterly, 44(4), 741-763.

Jha, K. N., & Iyer, K. C. (2006). Critical factors affecting quality performance in construction projects. Total Quality Management and Business Excellence, 17(9), 1155-1170.

Jiang, J. (2014). The study of the relationship between leadership style and project success. American Journal of Trade and Policy, 1(1), 51-55.

Jiang, W., Zhao, X., & Ni, J. (2017). The Impact of Transformational Leadership on Employee Sustainable Performance: The Mediating Role of Organisational Citizenship Behaviour. Sustainability, 9, 1567.

Johnson, M. D., Hollenbeck, J. R., Humphrey, S. E., Ilgen, D. R., Jundt, D., & Meyer, C. J. (2006). Cutthroat cooperation: Asymmetrical adaptation to changes in team reward structures. Academy of Management Journal, 49(1), 103-119.

Jonker, J. & Pennink, B. (2010). The essence of research methodology: A Concise Guide for Master and PhD Students in Management Science. Springer Heidelberg Dordrecht, London New York

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. Journal of applied psychology, 89(5), 755.

Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (Vol. 2, p. 528). New York: Wiley.

Katz, R., & Allen, T. J. (1984). Organisational issues in the introduction of new technologies.

Katzenbach, J.R. & Smith, D.K. (2003). *The wisdom of teams: Creating the High Performance Organisation.* New York: Harper Business Essentials.

Kellerman, B. (2004a). Bad Leadership: What It Is, How It Happens, Why it Matters. Boston: Harvard Business School Press.

Kellerman, B. (2004b). Leadership: warts and all. Harvard Business Review, 82 40-45.

Kissi, J., Dainty, A., Tuuli, M. (2013). Examining the role of transformational leadership of portfolio managers in project performance. International Journal of Project Management. 31 (4), 485–497.

Kolo, B. (2017). Influence of Client Organisation in achieving Value in Design.

Kotter, J. (2011). *Change management vs. change leadership what's the difference?* Forbes.

Kotter, J.P. (1990). *What leaders really do? Harvard Business Review*, May-June, 37–60.

Kozlowski, S.W., Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. Psychology Science Public Interest 7 (3), 77–124.

Kothari, C.R., & Garg, G. (2014). Research Methodology: Methods and Techniques (3rd Edition). New Delhi, New Age International (P) Limited.

Krech, D., Crutchfield, R. S., & Ballachey, E. L. (1962). Individual in society.

Krull, J., & MacKinnon, D. (1999). Multilevel mediation modeling in group-based intervention studies. Evaluation Review.

Kuhnert, R. & Lewis, P. (1987). Transactional and transformational leadership: *A* constructive/developmental analysis. *Academy of Management Review*, 12 648–657.

Lawler III, E. E. (2000). *Rewarding excellence: Pay strategies for the new economy*. Jossey-Bass.

Lamb, L.F & McKee, K.B. (2004). Applied Public Relations: Cases in Stakeholder Management.Mahwah, New Jersey: Lawrence Erlbaum Associates.

Lee, C. & Zemke, R. (1993). The search for spirit in the workplace. *Training*, 30, 21-28.

Lee, R.J. & King, S.N. (2001). *Discovering the Leader in You: A Guide to Realizing Your Personal Leadership Potential*. San Francisco: Jossey-Bass, Inc.

Leedy, P. D., & Ormrod, J. E. (2010). Practical Research: Planning and Design.

LePine, J. A., Piccolo, R. F., Jackson, C. L., Mathieu, J. E., & Saul, J. R. (2008). A meta-analysis of teamwork processes: tests of a multidimensional model and relationships with team effectiveness criteria. Personnel Psychology, 61(2), 273-307.

Lewin, K., Lippitt, R. & White, R. (1939). Patterns of aggressive behaviour in experimentally created 'social climate. *Journal of Social Psychology*, 10 271-299.

Likert, R. (1961). *New Patterns of Management"*. New York: McGraw-Hill.

Lipman-Blumen, J. (2005). The Allure of Toxic Leaders". New York: Oxford University Press Inc.

Littrell, R.F. (2002). Desirable leadership behaviours of multicultural managers in China. *Journal of Management Development,* 21 (1) 5–74.

Liu, J., & Liu, X. (2006). *International Journal of Business and Management. A Critical Review of Leadership Research Development*, 1-9.

Lohmöller, J. (1989). Latent variable path modeling with partial least squares. Heidelberg, Germany: Physica-Verlag.

Lord, R.G., De Vader, C.L. & Alliger, G.M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71 402–410.

Lovaglio, P., & Vittadini, G. (2013). Component analysis for structural equation models with concomitant indicators. Cham, Switzerland: Springer International Publishing.

Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. IEEE transactions on professional communication, 57(2), 123-146.

Lussier, R.N. & Achua, C.F. (2010). *Leadership: Theory, Application and Skill Development.* USA: South Western Cengage Learning.

Maccoby, M. (2000). Narcissistic leaders. Harvard Business Review, 78 (1) 69-77.

MacKinnon, D., Lockwood, C., Hoffman, J., West, S., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. Psychological Methods.

MacKinnon, D., Warsi, G., & Dwyer, J. (1999). A simulation study of mediated effect measures, 41–62.

Mann, R.D. (1959). *A review of the relationship between personality and performance in small groups"*. *Psychological Bulletin*, 56 241-270.

Manz, C. C., & Sims, H. P., (2001). *The New Superleadership: Leading Others to Lead Themselves:* Berrett-Koehler Publishers.

Müller, R., Sankaran, S., Drouin, N., Vaagaasar, A. L., Bekker, M. C., & Jain, K. (2018). A theory framework for balancing vertical and horizontal leadership in projects. *International Journal of Project Management*, *36*(1), 83-94.

Müller, R., Packendorff, J., & Sankaran, S., (2017b). *Balanced leadership: a new perspective for leadership in organizational project management*. In: Sankaran, S., Müller, R., Drouin, N. (Eds.), Cambridge Handbook of Organizational Project Management. Cambridge University Press, Cambridge, UK

Mumford, M. D., Zaccaro, S. J., Johnson, J. F., Diana, M., Gilbert, J. A., & Threlfall, K. V., (2000). "Patterns of leader characteristics: Implications for performance and development," *The Leadership Quarterly*, vol. 11, no. 1, pp. 115-133

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. Academy of management review, 26(3), 356-376.

Marks, M. A., Sabella, M. J., Burke, C. S., & Zaccaro, S. J. (2002). The impact of cross-training on team effectiveness. *Journal of Applied Psychology*, *87*(1), 3.

Marquis, B. & Huston, C. (2000). *Leadership Roles and Management Functions in Nursing*, (3rd Ed.). Philadelphia, PA: Lippincott, Williams and Wilkins.

Martinko, M. J., Harvey, P., & Dasborough, M. T. (2011). Attribution theory in the organisational sciences: A case of unrealized potential. Journal of Organisational Behavior, 32(1), 144-149.

Mathieu, J. E., & Schulze, W. (2006). The influence of team knowledge and formal plans on episodic team process-performance relationships. Academy of Management Journal, 49(3), 605-619.

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. Journal of management, 34(3), 410-476.

Maynard, M. T., Mathieu, J. E., Marsh, W. M., & Ruddy, T. M. (2007). A multilevel investigation of the influences of employees' resistance to empowerment. Human Performance, 20(2), 147-171.

McCall, M.W. (1998). *High Fliers: Developing the Next Generation of Leaders*. Boston: Harvard Business School Press.

McGrath, J. E. (1964). Social psychology: A brief introduction. Holt, Rinehart and Winston.

McGuire, E. & Kennerly, S. (2006). *Nurse Managers as Transformational and Transactional Leaders". Nursing Economic*, 24 (4) 179-185.

McIntyre, R. M., & Salas, E. (1995). Measuring and managing for team performance: Emerging principles from complex environments. Team effectiveness and decision making in organisations, 9-45.

Messick, D.M. (2005). On the psychological exchange between leaders and followers. *The psychology of leadership: New perspectives and research*, 81-96.

Mingers, J. (2012). Abduction: the missing link between deduction and induction. A comment on Ormerod's "rational inference: deductive, inductive and probabilistic thinking." *The Journal of the Operational Research Society*.

Mitchell, T. R. (1982). Motivation: New directions for theory, research, and practice. Academy of management review, 7(1), 80-88.

Mintzberg, H. (1983). The case for corporate social responsibility. *The Journal of Business Strategy*, *4*(2), 3.

Moser, C. A., & Kalton, G. (2017). Survey methods in social investigation. Routledge.

MTD Training Academy (2018). *Leadership Skills*.

Murphy, L. (2005). Transformational Leadership: A Cascading Chain Reaction. Journal of Nursing Management, 13 (2) 128-136.

Northouse, P. G. (2018). Leadership: Theory and practice. Sage publications.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychological theory. New York, NY: MacGraw-Hill.

O'Gorman, K. D., & MacIntosh, R. (2014). Research methods for business and management (2nd Ed.). Oxford: Good fellow.

Ofori, G., & Toor, S. (2012). Leadership and Construction Industry Development in Developing Countries. *Journal of Construction in Developing Countries*, Supp. 1.

Oser, R. L., McCallum, G. A., Salas, E., & Morgan Jr, B. B. (1989). Toward a definition of teamwork: An analysis of critical team behaviors (No. NTSC-89-004). Naval Training Systems Center Orlando Florida.

Ostroff, C., & Atwater, L. E. (2003). Does whom you work with matter? Effects of referent group gender and age composition on managers' compensation. Journal of applied psychology, 88(4), 725.

Paracha, U. K. (2017). Impact of Team Focused Transformational Leadership on Project Success Through Leader Member Exchange (LMX) and Moderating Role of Team

Cohesiveness. MSc. Thesis Unpublished, Capital University of Science and Technology,Islamabad.

Paulus, P. (2000). Groups, teams, and creativity: The creative potential of idea-generating groups. Applied psychology, 49(2), 237-262.

Peterson, R. S., & Behfar, K. J. (2003). The dynamic relationship between performance feedback, trust, and conflict in groups: A longitudinal study. Organisational behavior and human decision processes, 92(1-2), 102-112.

Pearce, C. L., & z, C. C., (2005). The new silver bullets of leadership: The importance of self- and shared leadership in knowledge work. Management Department Faculty Publications. [Online]: *http://digitalcommons.unl.edu/managementfacpub*

Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviours: The mediating role of core job characteristics. Academy of Management journal, 49(2), 327-340.

Pillai, R. (2013). Transformational leadership for crisis management. Handbook of research on crisis leadership in organisations, 47.

Porter, C. O. (2005). Goal orientation: effects on backing up behaviour, performance, efficacy, and commitment in teams. Journal of Applied Psychology, 90(4), 811.

Prentice, W.C.H. (1961). *Understanding leadership. Harvard Business Review*, 39 (5) 143.

Rauch, C. F., & Behling, O. (1984). Functionalism: Basis for an alternate approach to the study of leadership. In Leaders and managers, 45-62.

Raver, J. L., & Gelfand, M. J. (2005). Beyond the individual victim: Linking sexual harassment, team processes, and team performance. Academy of Management Journal, 48(3), 387-400.

Reddin, W.J. (1987). *How to Make Management Style More Effective*. Maidenhead: McGraw Hill.

Rees, D., Turner, R. & Tampoe, M. (1996). On being a manager and leader. In: Turner, J.R., Grude, K. & Thurloway, L. (Eds.). *The project manager as change agent*. Maidenhead, UK: McGraw-Hill.

Riaz, A., Tahir, M. M., & Noor, A. (2013). Leadership is vital for project managers to achieve project efficacy. Research Journal of Recent Sciences ISSN, 2277, 2502.

Rosenzweig, P. (2007). Misunderstanding the nature of company performance: The halo effect and other business delusions. California Management Review, 49(4), 6-20.

Ross, L. (1977). The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process1. In Advances in experimental social psychology (Vol. 10, pp. 173-220). Academic Press.

Rost, J. (1991). *Leadership for the Twenty-First Century.* Westport: Praeger.

Russell, R.F. (2001). The role of values in servant leadership. *Leadership & Organisation Development Journal*, 22 (2) 76-83.

Sarkus, D.J. (1996). Servant-leadership in safety*: advancing the cause and practice. Professional Safety*, 41 26-32.

Savelsbergh, C., Poell, R.F., & Van Der Heijden, B., (2015). Does team stability mediate the relationship between leadership and team learning? An empirical study among Dutch project teams. Int. J. Proj. Manag. 33 (2),406–418.

Shane, M., & Fields, D., (2007). "Exploring the impact of shared leadership on management team member job outcomes," *Baltic Journal of Management*, vol. 2, no. 3, pp. 251-272.

Saunders, M. N., Lewiz, P., & Thornhill, A. (2012). Research Methods for Business Students. (6th Ed.). Harlow, England: Pearson Education Limited.

Schyns, B. & Day, D. (2010). Critique and review of leader-member exchange theory: Issues of agreement, consensus and excellence.*European Journal of Work and Organisational Psychology*, 19 (1) 1-29.

Seltzer, J. & Bass, B.M. (1990). Transformational leadership: Beyond initiation and consideration. *Journal of Management*, 16 (4) 693-703.

Shafie, B., Baghersalimi, S., & Barghi, V. (2013). The relationship between leadership style and employee performance. Singaporean journal of business economics and management studies, 2, 21-29.

Shamir, B. (1995). Social Distance and Charisma: Theoretical Notes and an Exploratory. Leadership Quarterly, 6 19-47.

Shamir, B., House, R.J. & Arthur, M.B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organisation science*, 4 (4) 577-594.

Shaw, J. D., Zhu, J., Duffy, M. K., Scott, K. L., Shih, H. A., & Susanto, E. (2011). A contingency model of conflict and team effectiveness. Journal of Applied Psychology, 96(2), 391.

Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: the pivotal role of intragroup trust. Journal of applied psychology, 85(1), 102.

Sobel, M. (1982). Asymptotic intervals for indirect effects in structural equations models. Sociological Methodology. San Francisco: Jossey-Bass.

Sohmen, V. S., (2013). Leadership and teamwork: two sides of the same coin. Journal of IT Economic Development 4 (2), 1–18.

Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. Journal of Management. 32 (1), 132–157.

Steers, R.M., Porter, L.M. & Bigley, G.A. (1996). *Motivation and management at work*. Boston, MA: McGraw-Hill.

Stewart, G. L., & Barrick, M. R. (2000). Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type. Academy of management Journal, 43(2), 135-148.

Stogdill, R.M. & Shartle, C.L. (1948). *Methods for determining patterns of leadership behavior in relation to organisation structure and objectives. Journal of Applied Psychology*, 32 (3) 286.

Stone, A.G., Russell, R.F. & Patterson, K. (2004). Transformational versus servant leadership: A difference in leader focus. *Leadership &Organisation Development Journal*, 25 (4) 349-361.

Stout, R. J., Cannon-Bowers, J. A., Salas, E., & Milanovich, D. M. (1999). Planning, shared mental models, and coordinated performance: An empirical link is established. Human Factors, 41(1), 61-71.

Tabassi, A. A., Ramli, M., & Dashti, K. F. (2013). Transformational Leadership and Team Effectiveness in Construction Industry. Strategic Leadership Review, 3(4).

Taggar, S. (2002). Individual creativity and group ability to utilize individual creative resources: A multilevel model. Academy of Management Journal, 45: 315-330.

Tannenbaum, R. & Schmidt, W.H. (1958). *How to choose a leadership pattern.* Institute of industrial relations.

Tavakol, M. (2011). Making sense of Cronbach's Alpha ReliabilityCoefficient. *International Journal of Medical Education.*

Tenenhaus, M., Vinzi, V., Chatelin, Y., & Lauro, C. (2005). PLS path modeling. Computational Statistics and Data Analysis.

Tesluk, P. E., & Mathieu, J. E. (1999). Overcoming roadblocks to effectiveness: Incorporating management of performance barriers into models of work group effectiveness. Journal of applied Psychology, 84(2), 200.

Tesluk, P. E., Farr, J. L., & Klein, S. R. (1997). Influences of organisational culture and climate on individual creativity. Journal of Creative Behaviour, 31: 27-41.

Turner, J. R., & Müller, R. (2005). The project manager's leadership style as a success factor on projects: A literature review. Project management journal, 36(2), 49-61.

Turner, J.R., & Müller, R., (2006). Choosing Appropriate Project Managers: Matching Their Leadership Style to the Type of Project. Project Management Institute, Newtown Square, USA.

Turner, J.R., (2009). The Handbook of Project-Based Management: Improving the Processes for Achieving Strategic Objectives. 3th ed. McGraw-Hill Education (Asia), Singapore.

U.S. Army Handbook (1973). *Military Leadership.*

Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application*.

Van Seters, D.A. & Field, R.H.G. (1990). *The Evolution of Leadership Theory. Journal of Organisational Change Management,* 3 (3) 29-45.

Vinger, G., & Cillier, A. (2006). Effective transformational leadership behaviours for managing change. *SA Journal of Human,* 4(2), 1–9.

Vinzi, V. ., Trinchera, L., & Amato, S. (2010). PLS path modeling: From foundations to recent developments and open issues for model assessment and improvement: Handbook of partial least squares: Concepts, methods and application. New York, NY: Springer.

Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. Journal of the Academy of Marketing Science, 44(1), 119-134.

Vroom, V.H. & Yetton, P.W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.

Walker, A. (2015). Project management in construction. John Wiley & Sons.

Watson, T.J. (2002). Organising and Managing Work: Organisational, Managerial and Strategic Behaviour in Theory and Practice. Harlow: FT Prentice Hall.

Weber, M. (1947). *The Theory of Social and Economic Organisation.* 358-359. Translated by A.M. Henderson & Talcott Parsons. New York: The Free Press.

Webster, J., & Watson, R. (2002). Analysing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26.

Weldon, E., Jehn, K. A., & Pradhan, P. (1991). Processes that mediate the relationship between a group goal and improved group performance. Journal of personality and social psychology, 61(4), 555.

Wellington, P. & Foster, N. (2009). *Leadership for Engineers*. UK: *The Institution of Engineering and Technology*.

Wetzels, M., Schroder, G., & Oppen, V. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*.

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. Journal of Social issues, 25(4), 41-78.

Williams, C. (2011). Research methods. Journal of Business & Economic Research, 5(3), 65–72.

Williams, L. J., & O'Boyle Jr, E. H. (2008). Measurement models for linking latent variables and indicators: A review of human resource management research using parcels. Human Resource Management Review, 18(4), 233-242.

Wilson Learning (2006). *Integrated Leadership. Wilson learning's Point of View on Effective Leadership. Balance of Essence and Form*

Wold, H. (1985). Partial least squares. Encyclopedia of Statistical Sciences. New York, NY: Wiley.

Woodward, J. (1958). *Management and Technology*. London: Her Majesty's Stationary Office.

Wren, J.T. (1995). The leaders companion: Insights on leadership through the ages. New York: The Free Press.

Wright, P. (1996). *Leadership and the new science.* San Francisco: Berret-Koehler Publishers, Inc.

Whitehead, A.N., (2010). In: Griffin, D.R., Sherburne, D.W. (Eds.), Process and Reality. The Free Press, New York, NY.

Yang, J., & Mossholder, K. W. (2004). Decoupling task and relationship conflict: The role of intragroup emotional processing. Journal of Organisational Behavior, 25(5), 589-605.

Yang, L. R., Huang, C. F., & Wu, K. S. (2011). The association among project manager's leadership style, teamwork and project success. *International Journal of Project Management*, 29(3).

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. Journal of Leadership &Organisational Studies, 9(1), 15-32.

Yukl, G.A. (2001). *Leadership in Organisations* (5th Ed.). Upper Saddle River: Prentice Hall.

Zaccaro, S.J. (2007). *Trait-based perspectives of leadership. American Psychologist,* vol. 62, no. 1, pp. 6.

Zaeri, F., Rotimi, J. O. B., Hosseini, M. R., & Cox, J. (2017). Implementation of the LPS using an excel spreadsheet: a case study from the New Zealand construction industry. *Construction Innovation*, 17(3).

Zaleznik, A. (1989). *The managerial mystique: Restoring leadership in business*. New York: Harper & Row.

Zhang, X. A., Cao, Q., & Tjosvold, D. (2011). Linking transformational leadership and team performance: A conflict management approach. Journal of Management Studies, 48(7), 1586-1611.

Zheng, J., Wu, G., & Xie, H. (2017). Impacts of Leadership on Project-Based Organisational Innovation Performance: The Mediator of Knowledge Sharing and Moderator of Social Capital. *Sustainability*, 9, 1893.

Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? The Leadership Quarterly, 24(1), 94-105.

Zimmerer, T.W. & Yasin, M.M. (1998). A leadership profile of American project managers. *IEEE Engineering Management Review*, 11 (2) 211-226.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability andreporting findings. Theory and Practice in Language Studies.

QUESTIONNAIRE SURVEY

Department of Quantity Surveying,
Faculty of Environmental Design,
Ahmadu Bello University,
Zaria.
November, 2019.

Dear Respondent,

REQUEST FOR PARTICIPATION IN A QUESTIONNAIRE SURVEY

I am a research student in the Department of Quantity Surveying, Faculty of Environmental Design, Ahmadu Bello University, Zaria, conducting a research on an Assessment of Shared Leadership and Team Performance in Construction project in Nigeria. I solicit your participation in filling out the attached questionnaire.

The following questionnaire will require about 15 minutes to complete, please respond based on a project you worked on. All information gathered shall be used purely for research purpose and shall be treated with confidentiality.

Thank you for taking your time to participate in the research, if you require more information or have questions please contact me via the email address or phone number below.

The questionnaire consists of Three sections:

- Section A: General information
- Section B: Information on Respondent Understanding of Shared Leadership
- Section C: Measuring Project Team Performance

Carefully read the instructions just above each section of the Questionnaire before filling it.

Thank you for participating

Sincerely,

Victor Onoja AGADA
agadaonline@gmail.com;
07039147884

Section A – General Information (*Please tick only one Option for each*)

Service Provided: Architecture [ ] Building [ ] Engineering [ ] Project Management [ ] Quantity Surveying [ ] Any Other [ ] _____

Years of Working Experience: Less than 5 years [ ] 6 - 10 years [ ] 11 - 16 years [ ] 17 - 20 years [ ] Greater than 20 years [ ]

How many team work have you participated in? 1-2 [ ] 3-4 [ ] Above 4: [ ]

Size of Project Team: 1-2 [ ] 3-4 [ ] 5-6 [ ] Above 6 [ ]

Size of Project: Small [ ] Medium [ ] Large [ ] Very Large [ ]

Ownership of Project: Public [ ] Private [ ]

Nature of Project: Building [ ] Engineering [ ]

Status of Project: Completed [ ] On-going [ ] Suspended [ ] Abandoned [ ] Terminated [ ]

Section B –Shared Leadership within Teams

"To each of the statement below, indicate the extent you disagree/agree as it describe the team for which you are providing information on. Circle the option that best describes your choice. Please select the option that best describes your choice using the following scale; "Strongly Disagree=SD, Disagree=DA, , Agree =AG, Strongly Agree=SA".

Shared Leadership Descriptors	**Description**			
Task are efficiently carried out by team members	SD	DA	AG	SA
Leadership responsibilities is shared among team members when necessary	SD	DA	AG	SA
Leadership responsibilities is sometimes vested in only a single member of the team	SD	DA	AG	SA
When member leading the team leaves, the team's progress is unaffected	SD	DA	AG	SA
Each team member is called upon at some point to provide guidance and directive to the team	SD	DA	AG	SA
Every member of the team has the ability to build confidence in others	SD	DA	AG	SA
Every member Is given the privilege to enforce team norms and facilitating team learning	SD	DA	AG	SA
The team leader is selected based on the peculiarity of task the team is handling at any moment.	SD	DA	AG	SA
Clear expectation of new responsibilities is communicated to team members in other to regulate members behavior	SD	DA	AG	SA

The leadership roles available in my group result from the needs arising from our goals	SD	DA	AG	SA

Section C – Team Performance

To each of the statement below, please indicate the extent you disagree/agree as it describe the performance of your team. Please select the option that best describes your choice using the following scale; "Strongly Disagree=SD, Disagree=DA, Agree =AG, Strongly Agree=SA".

Project Team Performance	**Description**			
Team members take personal responsibility for the effectiveness of our team.	SD	DA	AG	SA
Team members appreciate one another's unique capabilities.	SD	DA	AG	SA
When an individual's role changes, an intentional effort is made to clarify it for everyone on the team.	SD	DA	AG	SA
Our team has a meaningful, shared purpose.	SD	DA	AG	SA
We always ask ourselves, "How can we do better tomorrow what we did today?	SD	DA	AG	SA
Team members take initiative to resolve issues between themselves without involving the team leader.	SD	DA	AG	SA
Everyone values what each member contributes to the team.	SD	DA	AG	SA
Team members frequently go beyond what is required and do not hesitate to take initiative.	SD	DA	AG	SA
Team's vision, mission, goals and objective are clarified amongst team members.	SD	DA	AG	SA
We view everything, even mistakes, as opportunities for learning and growth.	SD	DA	AG	SA
We consistently produce strong, measurable Results.	SD	DA	AG	SA
Team members avoid duplication of effort and make sure they are clear about who is doing what.	SD	DA	AG	SA
Team members seek and give each other constructive feedback.	SD	DA	AG	SA
Communication in our team is open, honest and effective with other teams	SD	DA	AG	SA
We use various forms of training to keep our skills up-to-date.	SD	DA	AG	SA

Our team works with a great deal of flexibility so that we can adapt to changing needs.	SD	DA	AG	SA
Overlapping or shared tasks and responsibilities do not create problems for team members.	SD	DA	AG	SA
Team members consider how their actions will impact others when deciding what to do.	SD	DA	AG	SA