

**EVOKING EMPLOYEE SAFETY CITIZENSHIP BEHAVIOUR: DOES LEADERSHIP  
STYLES AND PROFESSIONAL COMMITMENT PLAY A ROLE?**

**BY**

**ANGELINE ADDOTEY**

**(10272750)**

**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MPhil IN  
HUMAN RESOURCE MANAGEMENT DEGREE**



**JUNE 2016**

## DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

I bear sole responsibility for any shortcomings.

.....  
ANGELINE ADDOTEY  
(10272750)

.....  
DATE



## CERTIFICATION

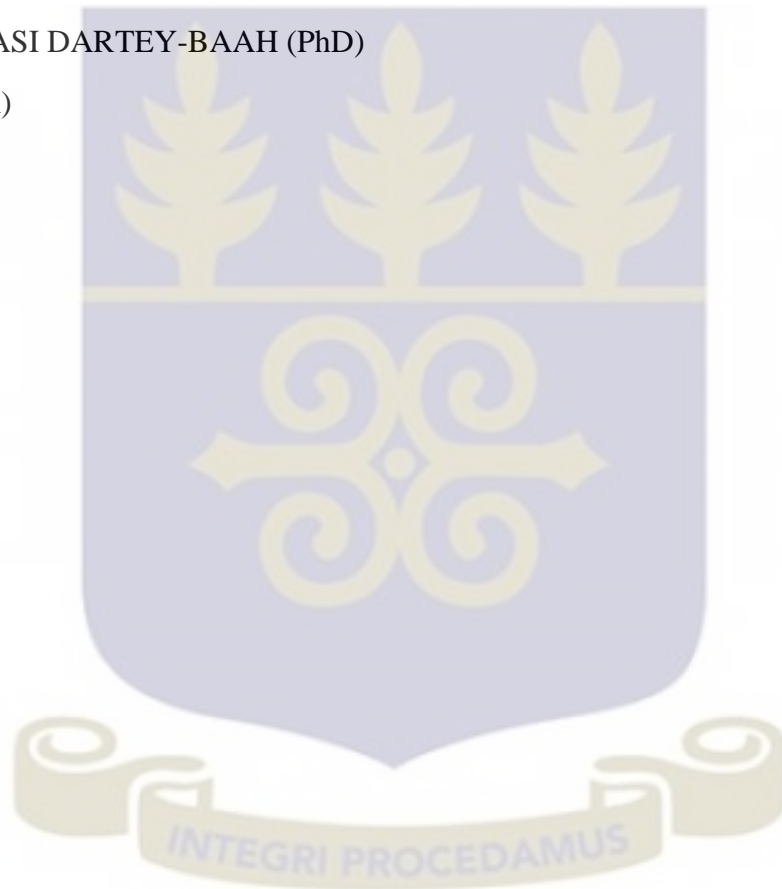
I hereby certify that this thesis was supervised in accordance with the procedures laid down by the University.

.....

SAMUEL KWASI DARTEY-BAAH (PhD)  
(SUPERVISOR)

.....

DATE



## DEDICATION

I dedicate this work to my heavenly father whose unconditional grace and mercies have been a source of my strength. Also to my parents who have shown me unconditional love and support throughout the years. Mum and Dad I love you.



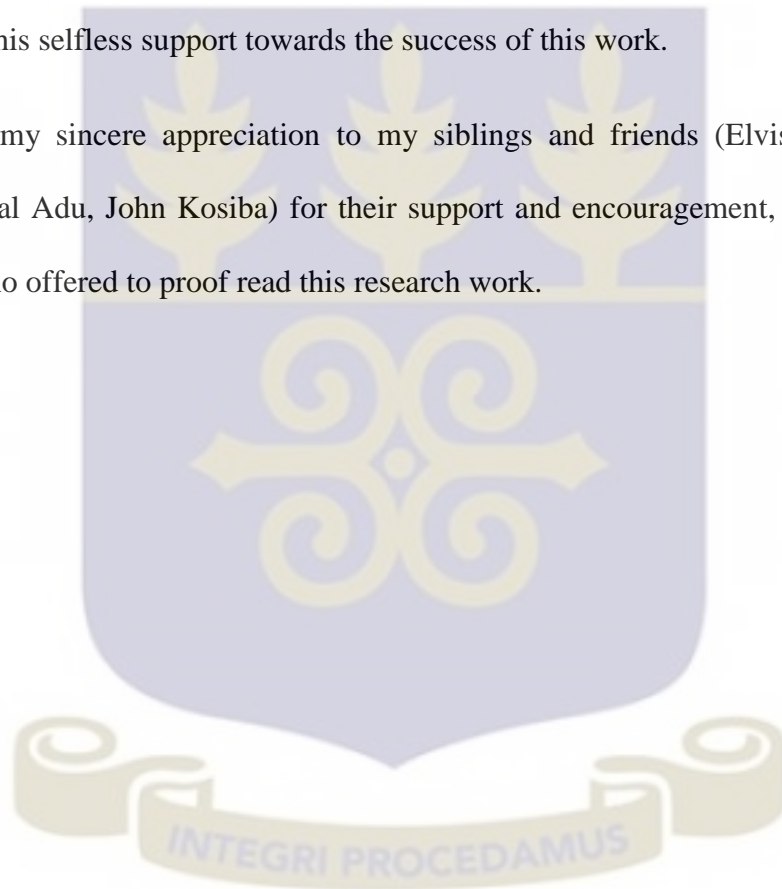
## ACKNOWLEDGEMENT

I am grateful to my supervisor Dr Kwasi Dartey-Baah for first of all accepting to supervise my work. I am sincerely grateful for his time, support, dedication, commitment, guidance, encouragement, valuable contribution and constructive criticism throughout the work

Also to Dr Kwesi Amponsh Tawiah for his valuable contribution to the success of this work

I am especially grateful to the management of the Electricity Company of Ghana especially Mr Aben Cabo for his selfless support towards the success of this work.

I also express my sincere appreciation to my siblings and friends (Elvis Anuka, Benjamin Mekpor, Micheal Adu, John Kosiba) for their support and encouragement, especially kwabena Adu-Ababio who offered to proof read this research work.



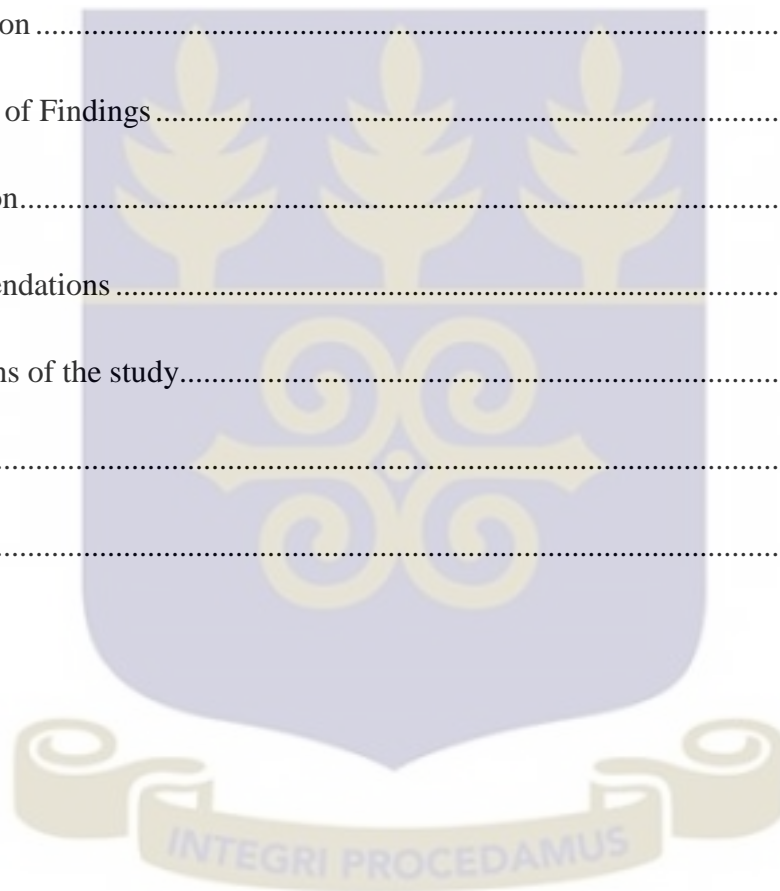
## TABLE OF CONTENT

|   |             |
|---|-------------|
| <b>DECLARATION.....</b>                   | <b>i</b>    |
| <b>CERTIFICATION.....</b>                 | <b>ii</b>   |
| <b>DEDICATION.....</b>                    | <b>iii</b>  |
| <b>ACKNOWLEDGMENT.....</b>                | <b>iv</b>   |
| <b>LIST OF TABLES.....</b>                | <b>viii</b> |
| <b>LIST OF FIGURES.....</b>               | <b>ix</b>   |
| <b>LIST OF ABBREVIATIONS.....</b>         | <b>x</b>    |
| <b>CHAPTER ONE: .....</b>                 | <b>1</b>    |
| <b>INTRODUCTION.....</b>                  | <b>1</b>    |
| 1.1 Background of the study .....         | 1           |
| 1.2 Problem Statement .....               | 10          |
| 1.3 Research Objectives .....             | 15          |
| 1.4 Research Questions .....              | 16          |
| 1.5 Research Hypotheses.....              | 16          |
| 1.6 Significance of the study.....        | 17          |
| 1.7 Scope of the Study.....               | 18          |
| 1.8 Definition of operational terms ..... | 19          |
| 1.9 Chapter Disposition.....              | 20          |
| <b>CHAPTER TWO:.....</b>                  | <b>21</b>   |
| <b>LITERATURE REVIEW .....</b>            | <b>21</b>   |
| 2.1 Introduction .....                    | 21          |

|                             |  |           |
|-----------------------------|--|-----------|
| 2.2                         | Theoretical background .....                             | 21        |
| 2.2.1                       | Leadership .....   | 21        |
| 2.2.2                       | Safety Citizenship Behaviour .....                       | 32        |
| 2.2.3                       | Professional commitment .....                            | 34        |
| 2.3                         | Theoretical Framework .....                              | 37        |
| 2.3.1                       | Leader Member Exchange (LMX) Theory .....                | 37        |
| 2.3.2                       | Conservation of Resource Theory .....                    | 42        |
| 2.4                         | Empirical Review .....                                   | 43        |
| 2.4.1                       | Leadership styles and Safety Citizenship Behaviour ..... | 43        |
| 2.4.2                       | Professional Commitment and Citizenship Behaviours ..... | 51        |
| 2.4.3                       | The moderating role of professional commitment .....     | 54        |
| 2.4.4                       | Conceptual Framework.....                                | 57        |
| <b>CHAPTER THREE:</b> ..... |  | <b>63</b> |
| <b>METHODOLOGY</b> .....    |  | <b>63</b> |
| 3.1                         | Introduction .....                                       | 63        |
| 3.2                         | Research Paradigm.....                                   | 63        |
| 3.3                         | Research Design .....                                    | 64        |
| 3.4                         | Population.....  | 66        |
| 3.5                         | Eligibility Criteria .....                               | 66        |
| 3.6                         | Sampling and Sample Size.....                            | 67        |
| 3.6.1                       | Sampling technique .....                                 | 68        |
| 3.7                         | Type and Source of Data.....                             | 69        |

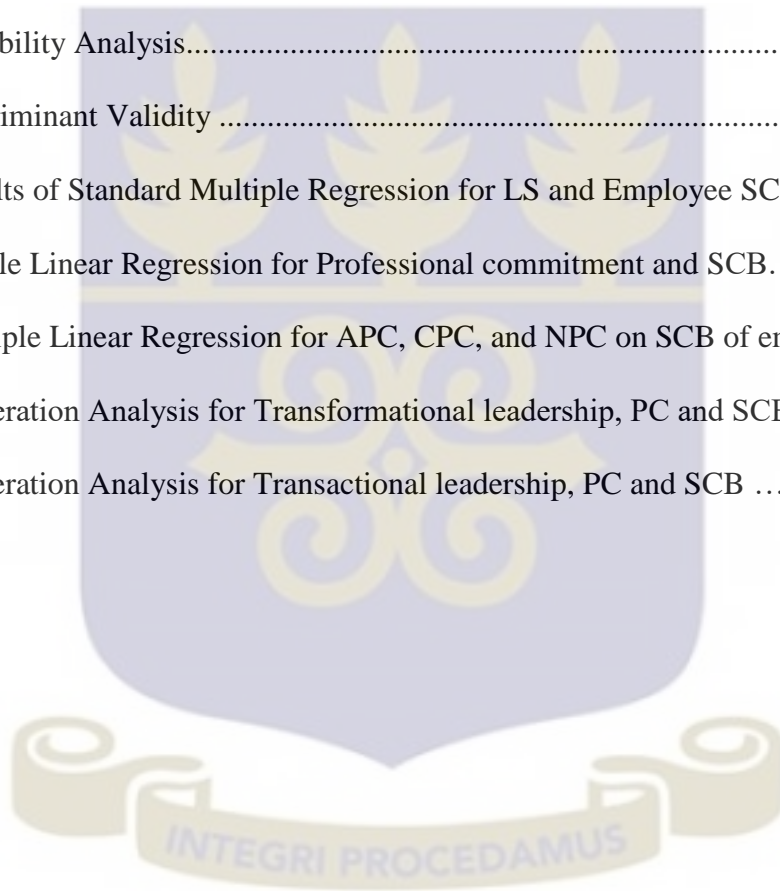
|   |           |
|---|-----------|
| 3.8 Data collection Instrument .....                    | 69        |
| 3.8.1 Leadership Styles.....                            | 70        |
| 3.8.2 Safety citizenship behaviour.....                 | 71        |
| 3.8.3 Professional commitment .....                     | 71        |
| 3.9 Reliability Analysis for Pilot Study .....          | 72        |
| 3.10 Data analysis .....                                | 73        |
| 3.11 Interpretation of data .....                       | 74        |
| 3.12 Ethical considerations .....                       | 74        |
| <b>CHAPTER FOUR: .....</b>                              | <b>78</b> |
| <b>PRESENTATION OF RESULTS .....</b>                    | <b>78</b> |
| 4.1 Introduction .....                                  | 78        |
| 4.2 Demographic characteristics of the respondents..... | 78        |
| 4.5 Testing Research Hypotheses.....                    | 82        |
| 4.5.1 Checking the Assumptions .....                    | 82        |
| 4.5.2 Assumption of multicollinearity .....             | 82        |
| 4.5.3 Assumption of linearity .....                     | 83        |
| 4.5.4 Assumption of homoscedasticity.....               | 83        |
| 4.5.5 Independence of Residuals .....                   | 83        |
| <b>CHAPTER FIVE: .....</b>                              | <b>92</b> |
| <b>DISCUSSION OF FINDINGS .....</b>                     | <b>92</b> |
| 5.1 Introduction .....                                  | 92        |
| 5.2 Socio demographic analysis of the data .....        | 92        |

|  |            |
|--|------------|
| 5.3 Findings on Research Objectives and Hypotheses Testing.....                  | 94         |
| 5.3.1 Transformational and Transactional Leaderships Relationship with SCB.....  | 94         |
| 5.3.2 Safety citizenship behaviour and professional commitment.....              | 97         |
| 5.3.3 Leadership styles and safety citizenship behaviour, PC as a Moderator..... | 100        |
| <b>CHAPTER SIX: .....</b>  | <b>102</b> |
| <b>SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS .....</b>               | <b>102</b> |
| 6.1 Introduction .....   | 102        |
| 6.2 Summary of Findings .....  | 102        |
| 6.3 Conclusion.....  | 103        |
| 6.4 Recommendations .....  | 104        |
| 6.5 Limitations of the study.....  | 105        |
| References.....  | 108        |
| APPENDICES .....   | 136        |



## LIST OF TABLES

| TABLE  | Page |
|--|------|
| Table 3.1: Reliability Values.....   | 72   |
| Table 3.2: Test for Normality.....   | 74   |
| Table 4.1: Demographic Variables.....  | 79   |
| Table 4.2: Descriptive Statistics.....   | 80   |
| Table 4.3: Reliability Analysis.....   | 81   |
| Table 4.4: Discriminant Validity .....   | 83   |
| Table 4.5: Results of Standard Multiple Regression for LS and Employee SCB.....      | 84   |
| Table 4.6: Simple Linear Regression for Professional commitment and SCB.....         | 86   |
| Table 4.7: Multiple Linear Regression for APC, CPC, and NPC on SCB of employees..... | 87   |
| Table 4.8: Moderation Analysis for Transformational leadership, PC and SCB.....      | 90   |
| Table 4.9: Moderation Analysis for Transactional leadership, PC and SCB .....        | 91   |



## LIST OF FIGURES

| <b>Figure</b>   | <b>Page</b> |
|---|-------------|
| Figure. 2.1: Leadership styles as a predictor of employee safety citizenship behaviour with Professional commitment playing a moderating role ..... | 57          |
| Figure. 4.1: Path diagram of moderation model.....  | 91          |
| Figure 4.2: Linear Relationship between Leadership Styles and SCB.....  | 141         |
| Figure 4.3: Scatterplots Showing Constant Variance of Error Terms.....  | 141         |
| Figure 4.4: Linear Relationship between Professional commitment and SCB.....  | 142         |
| Figure 4.5: Scatterplots Showing Constant Variance of Error Terms.....  | 142         |
| Figure 4.6: Linear Relationship between APC and SCB .....   | 143         |
| Figure 4.7: Scatterplots Showing Constant Variance of Error Terms.....  | 143         |
| Figure 4.8: Linear Relationship between NPC and SC.....   | 144         |
| Figure 4.9: Scatterplots Showing Constant Variance of Error Terms.....  | 144         |
| Figure 4.10: Conceptual framework after analysis.....   | 92          |



## LIST OF ABBREVIATIONS

|      |   |
|------|---|
| APC  | Affective professional commitment           |
| CPC  | Continuance professional commitment         |
| DV   | Dependent Variable                          |
| ECG  | Electricity Company of Ghana                |
| IV   | Independent Variable                        |
| LMX  | Leader- Member Exchange                     |
| MBEA | Management by exception active              |
| MBEP | Management by exception passive             |
| MLQ  | Multifactor Leadership Questionnaire        |
| NPC  | Normative professional commitment           |
| OCB  | Organizational Citizenship Behaviour        |
| PC   | Professional Commitment                     |
| SCB  | Safety Citizenship Behaviour                |
| SPSS | Statistical package for the social sciences |
| VIF  | Variance inflation factor                   |



## ABSTRACT

This study primarily examined the relationship between leadership styles and employee safety citizenship behaviour. The study further examined the moderating role of professional commitment on the leadership and safety citizenship behaviour relationship. A questionnaire was used to obtain data from one hundred and ninety seven participants from an energy distribution company in southern Ghana. Purposive and convenience sampling techniques were employed in data collection. Data was analysed using the statistical package for social sciences version 20 specifically, Pearson product moment correlation, simple linear regression, standard multiple regression, and hierarchical multiple regression were employed for analysis. Results of the regression analysis showed a significant positive relationship between transformational leadership and safety citizenship behaviour. Transactional leadership however demonstrated a negative relationship with safety citizenship behaviour. Furthermore, professional commitment only moderated the relationship between transformational leadership and safety citizenship behaviour. It was recommended that, leaders be assessed before they are assigned to safety sites. It was further suggested that more transformational leaders be put in front line supervisory roles in high risk industries.



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Decades ago, having a competitive edge and sustained profitability was enough to keep organizations in the good books of employees and customers (Irshad & Hashmi, 2014). However, the current dispensation of uncertain economies, internationalization, globalization, radical changes and developments in information processing not only calls for a competitive edge and sustained profitability but also compliance with civic commitments, the maintenance of ethical standards, and the establishment of a safe and equitable work environment (Acar, 2012; Hussain-Haider & Riaz, 2010).

Organizations in a bid to ensure that they meet the above demands are further confronted with regular hurdles of hostile take overs, changes in organizational environments, and their resultant innovations (Walumbwa, Orwa, Wang, & Lawler, 2005). Owing to the above challenges, it has become a daunting task for organizations to meet these complex market and organizational demands as well as anticipate, clearly identify, and formally spell out broad group of behaviours required for the smooth running of operations, as well as the realization of organizational goals and targets (VanYperen, Berg, & Willering, 1999).

Inferring from the above, it is quite obvious that there is the need for employees to contribute their quota and share in this responsibility by voluntarily engaging in extra roles that go beyond formally laid down obligations, to ensure their organizations remain competitive (Lee, Kim, & Kim, 2013). As Duarte (2015) rightly puts it, in this fast competitive era organizations can hardly thrive if they solely depend on the contribution of employee task that are mandated to be carried out. It is for this reason that forward thinking organizations

have become more concerned with identifying elements that encourage employees to go the extra mile in the discharge of their duties (Lo, Ramayah, Min, & Songan, 2010; Yousef, 2000).

Through developments in research and practise, several factors have been identified that propel employees to give their best to their respective organizations and professions. These include perceived organizational support, employee empowerment, high compensation contingent on organizational performance, job satisfaction, motivation, employment security, decentralized decision making, commitment, and leadership (Rainlall, 2004; Ugboro & Obeng, 2000). Although the above factors are critical, as explained earlier, organizations and professional bodies can no more rely uniquely on employees, or professionals who wholeheartedly put in maximum effort in the discharge of their duties. Human resource optimization has become critical (Lewis & Heckman, 2006).

In light of this, academics and practitioners have pointed to the fact that commitment, and leadership appear to dominate the focus and attention of research and when applied correctly can prove to be very effective in getting optimum results from employees and professionals (Bolino, 1999; Conger, 1999).

Commitment has received extensive research focus because, in addition to propelling employees to give their best to their respective organizations and professions, there is a psychological element embedded within commitment which acts as some form of a magnetic field that drives and encourages employees to exert additional effort on their jobs, which gradually results in the enhancement of voluntary behaviours among employees (Kular, Gatenby, Rees, Soane, & Truss, 2008). It is therefore not out of place to suggest that

commitment serves as a driving tool which ultimately drives employees to go beyond work requirements and obligations to achieve great heights sometimes at the detriment of their safety, health, and in unfortunate situations, their lives (Bolino & Turnley, 2003; Meyer & Allen, 2004).

In addition to commitment, leadership is one other vital non-negotiable component with regards to human resource optimization (Maxwell, 2007). In fact the style of leadership a leader adopts in managing employees, plays a key role in fostering employee proactiveness; this is because leaders are usually very salient in the work domain and are likely to exert a direct influence on subordinate behaviour (Kozlowski & Doherty, 1989); leaders further play a critical role in strategically managing employees to ultimately give their best and go beyond the employment contract to attain organizational success (Bolino & Turnley, 2003).

It has also been generally accepted that, effective leadership is very critical for the attainment of organizational success (Selznick, 2011). Being an important aspect of management, leadership cuts across all spheres of professional environments; education, health, Law, finance agriculture and even engineering (Brint, 2001). Moreover, it has been further observed that in sectors or situations where leaders fail to fulfil their mandated duties, there are disastrous consequences in the form of injuries, low productivity and poor work ethics which may translate to huge costs to the entities where such leadership exist, and this ultimately affects economic and social progress.

Although, Collier and Gunning (1999) have argued that, most African economies solely rely on natural resources for economic progress and survival, Statistics on the other hand, has pointed in the direction of human capital as the ultimate source in speeding up the pace of a

country's development (Kamukama, Ahiauzu, & Ntayi, 2010). This is because, the socio economic progress of a nation is not solely dependent upon the richness of its natural resources or monetary capital (Gylfason & Zoega, 2006). It has been further advanced that, in the face of globalization and numerous technological advancements characterised by the 21<sup>st</sup> century, human beings continue to remain vital assets of every organization (Mosadeghrad, 2003; Riaz, Akram, & Ijaz, 2011).

Despite the legal and moral duty compelling employers to safeguard the safety of their employees, it is surprising to note that, annually, millions of workers suffer disabling injuries and thousands of lives are lost at workplaces (Christian, Bradley, Wallace, & Burke, 2009; Seo, 2005). Accessible statistics discloses a frightening rate of work-related deaths and injuries in both the developed and developing nations (Inness, Turner, Barling, & Stride, 2010).

According to the Health and Safety Statistics 2013 Annual Report for Great Britain, 133 workers were killed at work. The labour force survey revealed that an additional, 629 000 injuries occurred at work, of which 148 000 led to over-7-days absence from work, a total of 28.2 million working days went down the drain due to work-related ill health or injury. This had serious cost implications for the British economy; as injuries and novel cases of ill health resulting largely from current working conditions cost the British society an estimated £14.2 billion in 2012/13. Similarly, statistics from the National and State by State Profile of Worker Safety and Health in the United States have revealed that in the year 2011, a total of 4,693 workers lost their lives on the job as a result of traumatic injuries. Data from the Bureau of Labour Statistics (BLS) further revealed that in the USA, on the average, 13 lives are lost due to work related injuries on a daily basis. This does not include workers who die from

occupational diseases. The latter which is estimated to be 50,000 each year results in an average of 137 deaths each day. Statistics from the European Union are no different. According to the Eurostat 2014 report, in the year 2011, an estimated 2.7% of the workforce in the EU was absent from work for more than three days due to a workplace accident. And a total of 3,691 work related accidents in the EU resulted in death.

Despite the concerns these statistics raise, the fact still remains that there is an underestimation of the reality at hand, as the costs and losses counted, do not include psychological losses or the damage to an organizations reputation which may negatively impact on recruiting and other efforts (Hofmann, Morgeson, & Gerras, 2003). This phenomenon exists because, most occupational injuries are either underreported or misclassified as a result of lack of thorough standards or unfamiliarity with existing standards (Annan, Addai, & Tulashie, 2015).

Industrial accidents and injuries are a source of substantial human and economic cost which can have devastating repercussions for both organizations and their employees (Gyekye & Salminen, 2005). For this reason, some industries have taken steps towards fostering a pre-emptive technique in the prevention of workplace injuries, and have turned towards key predictors of safety such as leadership (Flin & Yule, 2004). Research has advanced that, leaders play an instrumental role in the support, prevention and enhancement of safety at work (Griffin & Hu, 2013). Again leaders have been considered an essential and critical tool in ensuring the safe running of organizations (Martínez-Córcoles, Gracia, Tomás, & Peiró, 2011). This is mainly because, the actions, attitudes and behaviours of leaders often have a strong impact on subordinate's safety at work (Conchie & Donald, 2009; Flin & Yule, 2004; Kelloway, Mullen, & Francis, 2006). Currently, there has been a shift of focus in leadership

and safety research and this has been sparked by the realization that organisational, managerial and human factors rather than solely technical failures are prime causes of accidents in high reliability industries (Weick, Sutcliffe, & Obstfeld, 2008). Organizations in a swift response to this discovery are now redirecting efforts towards establishing a human risk management system; This means restricting and minimizing risky behaviours and enhancing safety behaviours at work (Didla, Mearns, & Flin, 2009). However, the successful execution of this task has been considered as the primary responsibility of leaders (Elsler et al., 2012).

Again, leaders are conferred a responsibility to develop, and execute strategic organizational decisions. In executing this task, leaders acquire, develop and deploy organizational resources optimally in order to bring out the best products and services in the best interest of stakeholders. Good leaders attain this by strategically putting conditions in place such as an equitable working environment, in order to retain the best employees in the current competitive era, while bridging the gap between corporate policies and expectations of employees (Halim, 2008). Kaur (2012) supports this assertion and goes on to emphasize the indispensable role leaders play in management and organizational growth in the 21<sup>st</sup> century.

Critically speaking, the fact still remains that having effective leadership is the main cause of competitive advantage for any kind of organization or Country (Zhu, Chew, & Spangler, 2005). It is for this reason that Hussain-Haider and Riaz (2010) have suggested that organizations all over the world are deeply concerned with understanding, searching and developing leadership.

Leadership is one area within organizational behaviour that has received considerable research. It gained roots as a formal concept in the 1700s (Stogdill, 1974). But surprisingly, till date there is no unanimous consensus on its definition (Schein, 2010). Literature has however been consistent and research shows a progressive pattern; which commences by focusing on the attributes and characteristics of a leader, then progresses to leadership behaviour and later emphasizes on the contextualized nature of leadership (Hussain-Haider & Riaz, 2010).

Contemporary leadership research however, focuses on styles of leadership which are referred to by Rafiq-Awan and Mahmood (2010) as the behaviour pattern used by a leader to resolve organizational issues. In as much as several leadership theories and styles have been propounded over the years, research continues to expand into various dimensions of these styles. This is because each leadership style is crucial at one point in time and none can be said to be the ultimate, as each leadership style is unique in its own way (Chaganti, Cook, & Smeltz, 2002).

Nonetheless, the choice of leadership style adopted and preferred at a particular point in time, is predetermined by the goals targets and objectives an organization aims at achieving (Goleman, 2000). With this understanding, it is paramount and very critical for an organization to set clear and concise goals, as this plays a major role in informing management decisions about the kind of leaders to place in strategic units to achieve desired results. It has been observed that several leadership styles can be identified in various leaders and each style contains its own set of good and not-so-good characteristics. However, adopting an effective leadership style is a major determinant which certainly improves organizational productivity. Although various styles of leadership such as laissez faire,

autocratic, resilient, and quite recently transformational have been identified (Bass, 1985; Burns, 1978; Dartey-Baah, 2015; Povah, 2012). Transformational and transactional leadership styles, dominate current leadership research. This is because, they are seen to be more relevant in today's global competitive environment and have been further associated with numerous positive organizational outcomes (Bass, Avolio, Jung, & Berson, 2003; Dartey-Baah & Ampofo, 2015; Dess, Picken, & Lyon, 1998; Hoffmeister et al., 2014). The success story is no different in relation to safety. A variety of safety outcomes associated with both leadership styles include, improved safety climate, decreased accidents and injuries, and increased safety behaviours and performance. (Barling, Loughlin, & Kelloway, 2002; Hoffmeister et al., 2014; Mullen & Kelloway, 2009).

Studies into employee safety performance at work have revealed that, the safety behaviours employees put up at work can be broadly classified into two. These are safety compliance, and safety participation (Clarke & Ward, 2006). Compliance with safety rules and regulations plays a critical role in lowering the risk of accidents and injuries. However, safety researchers have concluded that in order to achieve higher safety levels, mere concentration on compliance; which involves a control element and rigid implementation of safety rules and policies is not a sufficient tool (Clarke, 2013; Clarke & Ward, 2006; Hoffmeister et al., 2014). Rather, in a wake to realize optimum results with respect to safety, organizations require individuals who proactively and voluntarily participate in safety related behaviours and initiate improvements in safety (DeJoy, Schaffer, Wilson, Vandenberg, & Butts, 2004) .

According to Podsakoff, MacKenzie, Paine, and Bachrach (2000), citizenship behaviours are essential and necessary for organizational effectiveness and survival. Hofmann et al. (2003), throw more light on the important role leaders play in fostering employee proactiveness and

go on to argue that, employees are more likely to engage in safety related citizenship behaviours when they have high quality exchange relationships with their supervisors or leaders. Eid, Mearns, Larsson, Laberg, and Johnsen (2012), further emphasize how this has sparked an interest in uncovering the underlying mechanisms in the leadership, employee citizenship behaviours, and organizational processes that facilitate employee safety commitment in safety critical organizations.

In fact employee acts of citizenship has currently received massive research attention. This is because in this current dispensation, employees have become much more pre occupied with themselves than with their employing organizations. On the flip side, commitment to a profession could play an essential role in driving employees to go an extra mile in being proactive. This is because commitment in itself is a strong psychological tool that serves as a driving force for several positive work outcomes; which has also been largely attributed to several citizenship behaviours (Aranya, Pollock, & Amernic, 1981).

Styles of leadership have also been regarded and empirically supported as an important factor effect on the commitment behaviour of employees (Allen & Meyer, 1990). As a result of this, most studies involving leadership have made it a point to look at how committed leaders are in terms of meeting industry targets and goals (Street, Schroeder, & Schwartz, 1993; Welsch & LaVan, 1981). It is widely acclaimed that promoting safety can aid companies in securing a competitive edge. It is therefore in the interests of leaders to devise strategies which enhance safe behaviour among employees. As well as adopting leadership styles suitable and appropriate to different situations and cultures, (Elsler et al., 2012).

In the Ghanaian context, a number of legal steps have been taken to protect and secure employees' health and safety within various sectors, at both the national and industrial levels. Trending legislative tools include, the Factory offices and Shops Act, and the Labour Act. Although efforts have been put in place to pass other legislative tools, it has however been argued that these efforts are inadequate, as health and safety hazards, risk and disease rates continue to rise (Puplampu & Quartey, 2012). According to the ministry of health report (2007), this has been attributed to negative attitudes towards work, health, and safety practices, as employers are indifferent about the protection of employees' health and safety and even worse, some employers do not realize that they have the legal responsibility to protect employees' health and safety.

This notwithstanding, the current state of safety in the country does not necessary imply that legislation has failed in guaranteeing and securing the safety of employees and their working environments, but rather points to the fact that, legislation alone cannot guarantee and secure the safety of employees and their working environments. Amponsah-Tawiah, Ntow, and Mensah (2015) have therefore observed a call for the exploration of non-legislative means in the quest to secure safer working environments and conditions.

## **1.2 Problem Statement**

The Energy sector is characterised by numerous risks in connection with injury or illness, which results from accidents. Employees within this industry constantly deal with harmful substances and chemicals that cause burns, asthma, and dermatitis. Others also find themselves in working environments that can trigger severe respiratory conditions. There are specific hazards and problems associated with professions within the energy sector, these

range from exposure to cancer through starting of machines and its servicing, to exposure to live wires, and the possibility of electrocution (Goetsch, 2011; Thomas et al., 1987).

In Ghana, Engineers and Technical workers in power distribution companies' work with live wires, and are exposed to step/voltage, some also stay at the control rooms and substations that are full of electro-magnetic x-ray machines for long hours. Additionally, most cables are located in bushes which exposes them to harmful reptiles. It has been further observed that most transformers these workers work on, are very old, which exposes them to poly chloride biphenyl (PCB), and other carcinogens. Again, the nature of the power distribution industry requires that, workers come into direct contact with customers from time to time in order to successfully execute their duties. However, more often than not these workers stand the chance of being physically, verbally, and emotionally abused by enraged customers, especially in conducting disconnection exercises (ECG report, 2005). These and many other health and safety issues can affect employees' health and for that matter may retard the growth of the company if they are not well managed.

The ILO World Congress on Safety and Health at Work 2014 reported that, globally about 2.3 million people die annually from work related accidents and diseases. An estimated figure of close to a 1000 people die daily from occupational accidents alone. It has been further observed that, numerous work-related injuries, illnesses, property damages, and process losses occur at different workplaces but due to underreporting or misclassification as a result of lack of thorough standards, or unfamiliarity with the existing guidelines, people are normally unaware of such events and their actual or potential consequences (Annan et al., 2015). Numerous attempts have been made to curb occupational accidents and injuries. Nonetheless, high rates continue to persist worldwide (Hämäläinen, Takala, & Saarela,

2006). Murray and Lopez (1997) have additionally posited that by the year 2020, work related injuries will be the second leading cause of death. It is therefore very necessary to pay particular attention to research relating to safety at work. Safety is a leading concern in high risk industries of which energy is no exception. Most industrial accidents and injuries occur on the job and have been highly associated with employee's unsafe acts (Weihrich, Cannice, & Koontz, 2008). Studies have also pointed to the fact that organisational, managerial and human factors rather than purely technical failures are prime causes of accidents in high reliability industries (Weick et al., 2008). One would therefore expect organizations to place premium on selecting the right leaders to place in safety sites. In practise however, the opposite is demonstrated. Much emphasis is placed on technical factors; having well-constructed buildings, and ensuring machinery and plants meet safety requirements. These appear to be prioritised to the neglect of the sort of leaders or employees who are to ultimately ensure that safety is carried out to the last detail.

Investigations into the leadership and safety relationship has progressed substantially over the last 30 years, however, a greater number of these studies have focused on the influence and importance of overall effective leadership or general leadership styles on a variety of safety outcomes (Christian et al., 2009). Nonetheless, research into leadership and safety has established that transformational and transactional leaders are best leadership choices for safety sites (Clarke, 2013). However, the underlying mechanisms by which leadership may influence safety are not yet well understood (Zohar, 2002). As leadership is often conceptualized as a multidimensional construct. In light of this, Gordon and Yukl (2004) made a call for researchers to put in more concerted efforts to understand both the moderating and mediating mechanisms that link transformational leadership to follower outcomes. And commented that, only a few preliminary studies had simultaneously examined mediated

moderation or moderated mediation. Hoffmeister et al. (2014) also made a similar call for the study of the influence some moderating factors could have on the leader- employee safety relationship.

Additionally, Odumeru and Ifeanyi (2013) have made it clear that although transformational and transactional leadership styles have received considerable research focus, there is the need for further studies to delve deeper into these theories as it is quite clear from analysis of their strengths and weaknesses that more empirical work still needs to be done to gain clearer understanding of the influence of situational variables on the leadership outcomes of these two concepts. Again, although leadership appears to be the most frequently studied topic in the organizational sciences, the precise nature of leadership and its relationship with key criterion variables such as subordinate satisfaction, commitment and performance is still uncertain (Barnett, 2011).

In comparing transformational and transactional leadership, transformational leadership appears to have been studied more extensively by leadership researchers and has further been positively linked to a number of important organizational outcomes in many different types of organizations and situations, across different levels of analysis, and across cultures (Avolio, Bass, & Zhu, 2004; Dumdum, Lowe, & Avolio, 2002; Lowe, Kroeck, & Sivasubramaniam, 1996). Although this assertion has been further supported by the global leadership and organizational behaviour effectiveness research programme, other scholars share a contrasting opinion and have argued that even within the European, American, and Asian context, results are inconclusive, especially within Belgium Finland and the Philippines (Kirkman & Shapiro, 2001). Moreover, varying reports on leadership and commitment behaviours have been reported even among same nationals residing in different

host countries (Kirkman & Shapiro, 2001). This attests to the fact that the context within which situations occur, has a potential to greatly affect the expected outcomes. It is therefore unwise to generalize findings from one cultural context to the other. Kuchinke (1999) also supports the assertion and has made a call for an African perspective on the concept of leadership.

Similar to the concept of leadership, commitment has been a theme of great interest in organizational, and behavioural research, and has been significantly associated with several citizenship behaviours, job satisfaction and job performance (Porter, Steers, Mowday, & Boulian, 1974; Sharma, Dhar, Garavan, & Pezet, 2016). Although extant literature has further advanced that, the right leadership style for a context or situation results in commitment, it is quite unfortunate that, most studies have focused on employee and organizational commitment, ignoring the salient role commitment to a profession could play in organizational outcomes (Duarte, 2015; Goulet & Singh, 2002; Pillai & Williams, 2004). In line with this, some scholars have made a call for researchers to examine the joint interaction between professional commitment and citizenship behaviours (Cohen, 2006; Didla et al., 2009; Duarte, 2015).

Although employers are legally mandated to ensure the safety of their employees, in Ghana there are no sound laws enforcing safety issues with greater emphasis being laid on increasing productivity and profitability, whiles compromising health and safety standards, procedures and policies (Puplampu & Quartey, 2012). It is necessary for organizations to focus on factors that enhance citizenship behaviours at work specifically with respect to safety and focus on ways of enforcing and encouraging these citizenship behaviours among employees.

Podsakoff et al. (2000) in a review to examine a wide range of factors in the citizenship behaviour literature, mentioned a number of antecedents such as job attitudes, task variables, and various types of leader behaviours. They further concluded that, these fore mentioned factors were strongly related to citizenship behaviours than other antecedents scholars had previously identified. They however indicated professionalism, as an unmentioned and rarely examined construct which had a high propensity to influence employee citizenship outcomes. Cohen and Kol (2004) similarly, made a direct call for the investigation of professional commitment, citizenship behaviours, and variables that represent leadership or management styles. This study is a response to this call, as from review of studies conducted, there is the need to investigate the inter relationship between leadership styles and employee safety citizenship behaviour in the Ghanaian context and to determine if professional commitment alters the relationship in any way.

### **1.3 Research Objectives**

The study sought to examine the relationship between leadership styles (transformational and transactional) and employee safety citizenship behaviour, and to determine whether professional commitment would moderate the relationship among selected staff of the Electricity Company of Ghana (ECG). The study specifically sought,

1. To determine the extent to which leadership styles (transformational and transactional) predict employee safety citizenship behaviour
2. To determine the effect of employee professional commitment on employee safety citizenship behaviour
3. To examine the moderating role of professional commitment on leadership styles and employee safety citizenship behaviour

#### **1.4 Research Questions**

In view of the research objectives, the research questions are as follows

1. To what extent does leadership styles (transformational and transactional) predict employee safety citizenship behaviour?
2. To what extent does employee professional commitment predict employee safety citizenship behaviour?
3. Will professional commitment moderate the relationship between leadership styles and employee safety citizenship behaviour?

#### **1.5 Research Hypotheses**

The study proposed the following hypotheses

H1a: Transformational leadership style will have a positive relationship with SCB

H1b: Transactional leadership style will have a positive relationship with SCB

H2a: Employee professional commitment will have a significant positive relationship with SCB

H2b: There will be a positive relationship between affective professional commitment and employee Safety citizenship behaviour

H2c: There will be a positive relationship between normative professional commitment and employee safety citizenship behaviour

H2d: There will be a positive relationship between continuance professional commitment and employee safety citizenship behaviour

H3a: Employee professional commitment will moderate the transformational leadership style and SCB relationship

H3b: Employee professional commitment will moderate the transactional leadership style and SCB relationship

### **1.6 Significance of the study**

According to published data on accidents that occurred worldwide since 1970, the energy sector has been labelled as one of the major contributors to man-made disasters. (Hirschberg, Burgherr, Spiekerman, & Dones, 2004). Figures relating to health and safety are also quite worrying. However, the British safety council 2009 has reported that most occupational accidents and injuries are in fact avoidable and preventable. Thus, safety research should be directed towards prevention, and this should be the focus for policy formulation, and practise. Theoretically, this study contributes to limited Ghanaian research and extant literature on the importance of leadership, on employee safety citizenship behaviour and professional commitment. These concepts have been examined as unitary constructs, however extant literature reveals that all three are yet to be formally examined within a single study.

Again, with the ascendancy in global unemployment rates, it is very likely that, most people may have found themselves in professions by chance. Nonetheless, growing internationalization has meant that more people are getting higher education and joining professional bodies. Are all these human capital upgrades for material gains or there is some level of commitment to the profession?

The current Ghanaian government plans on diversifying some state institutions of which the ECG might be affected. This is shrouded in a lot of controversy and denial. However, management of ECG has failed to come clean on the matter to let their employees know where the truth stands. It is very likely that in the current state of confusion and apprehension,

employee commitment to the organization has plummeted. On the other hand, numerous authors have attested to the fact that employee involvement in a variety of work outcomes and success is significantly related to their commitment to their chosen professions (Baugh & Roberts, 1994; Lee, Carswell, & Allen, 2000). It has been further postulated that employees with scientific or technical orientation are primarily interested in the professional content of their work thus, more concerned with meeting professional standards and approval (Gerpott, Domsch, & Keller, 1988). Going by these assertions, a general expectation is that, professional commitment should be high among the targeted population chosen for the study.

Research has also advanced that, professional commitment plays a crucial role in fostering positive work attitudes and outcomes (Goulet & Singh, 2002). Going by this advancement, the organization can rely on employee commitment to their chosen professions to ensure that they give their best to the organization, even though they are currently not too happy with the organization. In relation to policy and practise, it has been widely speculated that not all occupational groups are equally sensitive to leadership style. Individuals performing intellectually intensive work have been shown to be much more sensitive to leadership style than those performing administrative work. Berson and Linton (2005), as well as Shamir and Howell (1999) have demonstrated that the influence of leadership on workers such as scientists and engineers, who are engaged in complex tasks is higher, than on other professional groups performing less complicated tasks. How true can this be for ECG?

### **1.7 Scope of the Study**

The study concentrated on leadership and employee safety citizenship behaviour within a Ghanaian power distribution industry. Specifically, it focused on how transformational and

transactional leadership styles relate to employee safety citizenship behaviour. The study based its focus on the electricity company of Ghana. This organization was suitable for the study because, although there are two power distribution companies in Ghana, namely the Northern Electricity Department (NED), and the Electricity Company of Ghana (ECG), ECG focuses its operations on southern Ghana, whereas NED concentrates on Northern Ghana. Comparatively, ECG has a larger staff strength and a wider operational network. The pressures associated with power demands in the southern part of Ghana further predisposes technical employees to safety hazards, which makes this organization a suitable case for the study.

### **1.8 Definition of operational terms**

- Leadership: the ability of an individual to motivate others to forego self interest in the interest of a collective vision and to contribute to the attainment of that vision by making significant personal sacrifices over and above the call of duty, willingly (House & Shamir, 1993)
- Leadership styles: The behaviour pattern used by a leader to resolve organizational issues (Rafiq Awan & Mahmood, 2010)
- Transformational leadership style: A process by which leaders motivate followers to do more than they originally expected to do (Bass, 1985)
- Transactional leadership: An exchange process in which both the leader and follower influence each other reciprocally so that they both derive something of value.(Yukl, 1989)
- Safety citizenship behaviour: discretionary safety behaviours that are not directly or explicitly recognized by the formal reward system, but ultimately promotes the effective functioning of the organization (Xuesheng & Xintao, 2011)

- Professional commitment : A persons involvement, pledge, promise or resolution towards his or her profession (Irving, Coleman, & Cooper, 1997; Yang et al., 2012).

### **1.9 Chapter Disposition**

The study is divided into six chapters. Chapter One, is the introductory chapter of the study and comprises background of the study, research problem, research objectives, research questions, hypotheses proposed to be tested, significance of the study, an introduction to the case company and finally, definition of key terms used in the course the study. Chapter Two focuses on review of relevant literature in relation to the variables under study (transformational leadership, transactional leadership, safety citizenship behaviour, and professional commitment). It further examines the relationships that exist between these variables, which led to the development of a conceptual framework to summarize the hypothesized relationship. Chapter Three discusses the methodological approaches chosen for the study. It takes into consideration items such as research design, sources of data, study population, sample and sampling procedures, data research instrument, data collection procedure, data processing and mode of analysis. Chapter Four immediately follows and takes a critical look at the results derived from the analysis, results presentation, and interpretation of data. The researcher further discusses the findings of the study in Chapter Five. Chapter Six is the final chapter and presents the summary of key findings, conclusions, recommendations of the study, limitations of the study, as well as suggestion for future research. This chapter is immediately followed by references and appendices.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Several scholars have critically examined and tried to explain the concept of leadership, safety citizenship behaviour, and professional commitment from varying points of view. This section of the research dissertation reviews the relevant literature in relation to the variables under the study. It further discusses how leadership, safety citizenship behaviour, and professional commitment are theorized and assessed as concepts, and examines the relationships that exist within these constructs, as well as their contribution to the present study. The section has been categorized under theoretical background of the constructs, empirical review, and finally the conceptual framework with the study hypotheses.

#### **2.2 Theoretical background**

##### **2.2.1 Leadership**

Although the word leader dates as far back as ecclesiastical times, it was in the 1700s that leadership was formally embraced as an academic concept (Stogdill, 1974). Nonetheless, ever since, it has risen to be one of the most reviewed themes in organizational life, as its been researched extensively across various contexts and theoretical foundations (Kaur, 2012). Being one of the most researched themes in organizational life, and having been accredited to be one of the topical issues within the management sciences to have enjoyed extensive research, in addition to having been the area of expertise of several academics and behavioural researchers, it is quite interesting that till date, there is no unanimous concession on the true definition of leadership (Bučiūnienė & Škudienė, 2008; Schein, 2010). Bennis (1997) however, alludes it to the concept of beauty, in his words, “leadership is like beauty, it

is hard to define but you know it when you see it.” This statement is a confirmation of Bass (1985) assertion that the search for a unanimous interpretation of leadership is pointless.

Burns (1978) asserts that, leadership is one of the most studied but least understood phenomenon on earth. Deanne and Hartog (2001) add their voice to this assertion by agreeing that indeed, although leadership has been studied extensively, academics and the general public still find it fascinating; this is because of the varied interpretations people give to the concept of leadership. Elaborating further, they argued that disparities in various definitions were basically as a result of divergent point of reference, or focal points of several authorities, which they identified to be leader abilities, personality traits, influence relationships, the cognitive versus emotional orientation, individual versus group orientation, or an appeal to self-versus collective interest.

It is quite clear that, these variations in interest or emphasis are perhaps the reason why leadership has been and continues to remain a very controversial concept with over 350 definitions (Bennis & Nanus, 1985). Despite the numerous definitions, Bryman (1992) opines that, most definitions and interpretations of the concept emphasize three main elements namely group, influence, and goal. A review of some definitions by scholars spanning the last three decades affirms this assertion.

According to Rauch and Behling (1984), leadership is the process of influencing the activities of an organized group toward goal achievement. Leadership has also been described as a process of social influence, in which one person can enlist the aid and support of others in the accomplishment of a common task (Chemers, 1997). Northouse (2014), further describes leadership, as a process whereby an individual influences a group of individuals to achieve a

common goal. Lian and Tui (2012) share a similar opinion, and go on to explain that leadership is the ability to influence others to get things done.

Khan, Ghouri, and Awang (2013) are however of the belief that, in developing countries, leadership refers to an individual who has a capacity to develop a vision, and is able to transform it into a mission, by following a comprehensive strategy. Dartey-Baah (2015) similarly opines that leadership borders on initiation, involves people, and entails providing direction to resources, behaviours, and energies towards goal achievement. It is quite obvious from the above conceptualizations that, leadership plays an integral role in organizational life. It is therefore not surprising that, hundreds of researches have been conducted and thousands of books and articles have been published on this topic (Rafiq Awan & Mahmood, 2010). Leadership research has been characterised by numerous trends. Which can be broadly categorized into three dimensions (Dartey-Baah, 2015). With respect to the first dimension, scholars have accessed the concept through an examination of the inherent qualities possessed by some people which positions them to take up leadership roles. These include the Great Man and Traits theories (Carlyle, 1888).

The second dimension, also focused on the behaviours exhibited by leaders as well as the context within which leaders find themselves as a means of describing the concept of leadership. The Behavioural, Situational and Contingency theories of leadership fall within this scope (Fielder, 1967; Lewin, 1935). With regards to the third dimension, contemporarily, others have assessed the concept based on the relationship and exchanges that exist between leaders and their followers in pursuit of organisational goals. Transformational, transactional, and quite recently, resilient leadership; which in reality is a fusion of transformational and transactional leadership (Transforsactional) falls under this category (Dartey-Baah, 2015).

Reviewing the three dimensional trends, earlier works on leadership focused on the great man theory and the speculation that, great men or leaders were born and not made, thus the elements and qualities that distinguished great leaders from ordinary people were inherent and present from birth. The use of the word “man” was in actual sense deliberate, to emphasize that, at the time, leadership was a reserved role for only males (Hussain Haider & Riaz, 2010). The underlying understanding characteristic of this era was that, leadership was a characteristic of extraordinary individuals. Hence it was virtually impossible to make or develop leaders (McCleskey, 2014).

It is significant to note that earlier debates on whether leaders are born or made have somewhat been put to rest by a study conducted by Arvey, Zhang, Avolio, and Krueger (2007). In their exploration of fraternal and identical twins, evidence pointed to the fact that about 70% of the differences in leadership style and emergence, could be attributed to disparities in environmental factors such as individuals having different role models and early opportunities for leadership development. Heritability on the other hand, accounted for only 30% variation. As fascinating a discovery as this was, nonetheless a number of people still rely on hereditary and genetic factors in assessing leadership.

Other earlier theories include the trait theory. This was predominantly the leadership trend in the early twentieth century. It was widely speculated that, there were key traits that distinguished leaders from followers. Numerous studies attempted to identify and isolate the traits or qualities exhibited by good leaders. Factors including intelligence, dominance, self-confidence, level of energy, activity, and “masculinity” were all cited as key traits, however, none of these were adequate in differentiating leaders from followers (Ali, 2012). Owing to limitations of the trait theory the behavioural theory was introduced.

The behavioural theory was characterised by the study of leadership, based on the behaviour of the leaders themselves. The assumption underlying this trend suggested that, leadership behaviour could be learned or unlearned. Thus, individuals could be trained or educated to become leaders. This is because leadership was viewed as a behavioural dependent variable. Further research in this field however revealed that, situational and contextual factors played an indispensable role in the acquisition of “leader behaviour” hence, the introduction of the situational or contingency theory of leadership. Situational theorists posited that leadership was dependent or contingent on the context and situation at hand. Fiedlers Contingency Model, Hersey and Blanchards Situational Leadership Model, and Path-Goal Model by House (1971), have all supported this concept of leadership. Contingency theorists believed that a single style of leadership was unsuitable for all workplace environments (Chandan & Devi, 2014). Yukl and Mahsud (2010) termed this as context specific leadership. Contingency theorists of leadership additionally proposed that effective or ineffective leadership was contingent on the situation at hand; indicating that certain leadership behaviours may be appropriate and effective in some situations but not in others.

With respect to the third trend, Fullan (2006) asserts that in order to keep up with the changing and competitive environment of the 21<sup>st</sup> century, there is the need for leadership to be complex. Similarly, McGrath (2013) argues that competitive advantage is slowly evolving and is in actual fact fast becoming transient. This implies that, there is the need for organizations to continuously adjust, keep up with changes in market demands, meet customer needs, and still work tirelessly to attain set goals and targets. In order to successfully achieve these, leaders ought to be task and change oriented. That is, meet your organizational set goals and targets and still keep up with changes and demands in the market, and this is what resilient leadership proposes. It has been argued to be a task and

change oriented leadership (Clayton, 2012; Patel, 2010; Povah, 2012; Robb, 2000). Dartey-Baah (2015) however argues that, it is no maiden concept as a critical assessment reveals, it is actually a fusion of transformational and transactional leadership styles.

### **2.2.1.1 Leadership Styles**

With regards to transformational and transactional leadership, Dartey-Baah and Ampofo (2015) have emphasized the argument raised by Bass and Steidlmeier (1999) that, transformational and transactional leadership appear to be dominating leadership research. This is mainly because, they are seen to be of relevance to modern organizations and further contribute immensely to the success of organizations (Laohavichien, Fredendall, & Cantrell, 2009). Burns (1978), formally introduced the concept of transformational and transactional leadership. Bass (1985) later built on this theory. Both scholars integrated ideas from trait, style, contingency, leader member exchange research, and their own observations on leadership to develop these leadership styles (Den Hartog, Van Muijen, & Koopman, 1997; Lowe et al., 1996).

Transformational and transactional leadership are usually contrasted in research. This however does not imply that, they are parallel or unrelated constructs (Hater & Bass, 1988). Burns (1989) assessed them as reversed sides of a continuum, which makes it possible for a leader to be both transformational and transactional (Bryman, 1992). Bass (1985), however argued that transformational leadership builds on transactional leadership but not vice versa. Thus, transformational leadership can be viewed as a special case of transactional leadership (Den Hartog et al., 1997). In as much as they are linked to the achievement of goals and objectives, nonetheless, they differ in the process by which a leader motivates followers on the type of targets set (Hater & Bass, 1988). According to Bass, (1985) they are complementary rather than polar constructs.

### **2.2.1.2 Transactional Leadership theory**

A transactional leadership style is basically a cost benefit exchange relationship between a superior and a subordinate, or leader and follower in which both the leader and the follower influence each other to gain something of value (Bass & Avolio, 1993; Burns, 1978). Howell and Avolio (1993); Kellerman (1984); and Pastor and Mayo (2006), view it as a reciprocal relationship of mutual dependence, as rewards and incentives are offered in exchange for effort and compliance. Despite the “cost benefit exchange nature” of a transactional leadership, Kuhnert and Lewis (1987) emphasize the superior role and upper hand leaders have in this relationship; as it is usually in the best interest of followers to ensure that, they do exactly as the leaders want in order to receive certain valued outcomes (Burns, 1978). Conversely, transactional leaders can also punish poor work or negative outcomes, until the problem is corrected or performance criteria is met (Odumeru & Ifeanyi, 2013).

Due to the exchange compensation factor, a transactional style of leadership is ideal in several settings and may encourage compliance to practice standards, but not necessarily openness to innovation (Aarons, 2006). Transactional leaders are willing to work within existing systems and negotiate to attain goals of the organization. Consequently, they tend to think inside the box when solving problems; this is largely because, they accept goals, structure, and the culture of the existing organization. In effect, transactional leaders tend to be directive and action oriented. (Odumeru & Ifeanyi, 2013).

Transactional leaders are primarily preoccupied with getting employees to perform to meet set expectations. Thus, they tend to be obsessed with following due process rather than forward thinking ideas (Hargis, Watt, & Piotrowski, 2011). This can largely be attributed to the fact that the left part of the brain (rational behaviour) is dominant in operation whiles the

right part (emotional intelligence), is completely excluded (Nikezić, Purić, & Purić, 2012). Moreover, inflexibility of leadership is a characteristic of this model, so any attempt to change this leadership style is difficult and almost unsuccessful. This is largely because, the leadership style is embedded within the persons personality and forms his personal characteristic; which is something unchangeable (Nikezić, Dašić, & Bojić, 2012). Facets of transactional leadership style include contingent reward, management by exception active, and management by exception passive (Avolio, Bass, & Jung, 1999; Pastor & Mayo, 2006).

Contingent rewards: comprise providing appropriate psychological and material rewards, as well as recognition for positive behaviours, contingent on the attainment of contractual obligations, while explicitly communicating those reward contingencies to employees beforehand (Bass, 1985; Hoffmeister et al., 2014). These often inspire a degree of involvement, loyalty, commitment and performance from subordinates. Both types of management-by-exception (active, and passive), comprise discouraging some negative behaviour, and have been shown to have positive effects on several employee outcomes (Bass, 1985).

Management-by-exception active, is proactive and targets prevention. Here, leaders are vigilant and actively monitor the performance of followers, in order to anticipate faults and deviations from standards, so that corrective measures can be taken immediately they occur before they become problems (Dartey-Baah & Ampofo, 2015). The leader initiative nature of this leadership style, makes it the most effective style of leadership to adopt when projects have to be carried out according to specifications (Fasola et al., 2013; Hackman & Wageman, 2009). Management- by-exception passive: This style of leadership is reactive and is targeted at correction after an error or mistake has already occurred. Leaders avoid specifying agreements and only intervene when problems arise (Karip, 1998).

### **2.2.1.3 Transformational Leadership Theory**

Unlike transactional leadership, transformational leadership is not based on a give and take relationship, but on the leaders personality trait, and the ability to make change through visions and goals (Saeed & Ahmad, 2012). According to Burns (1978) the central feature of transformational leadership, is the process and ability with which leaders motivate followers and appeal to their values and emotions. Transformational leaders stimulate, inspire and transform the values, aspirations, needs, and priorities of followers. By so doing, they succeed in getting followers to exceed expectations and do more than they originally expected, and often even more than they thought possible (Atwater & Bass, 1994; Robbins & Coulter, 2007). Consequently, transformational leaders convert their followers to higher levels of performance and other positive work related outcomes (Lin & Hsiao, 2014).

DuBrin (2010), idealizes transformational leadership as the leadership style that brings about positive improvements in the work place; this is largely because transformational leaders inspire their supporters and create a healthy environment at their work places, by encouraging employees to ask questions, think about their job and work, find solutions to problems at work, create different opportunities for learning, and appreciate innovative ideas (Jha, 2014). Such leaders obtain extraordinary effort, motivation, self-sacrificial behaviour, and performance from their followers (Pastor & Mayo, 2006). Moreover, they get the greatest performance from subordinates, since they are able to raise their capabilities for success and develop their innovative problem solving skills (Bass, 1985; Waldman, Bass, & Yammarino, 1990). In addition to the fore mentioned, transformational leaders generate trust, respect and admiration from followers. These are considered important facilitators which motivate followers to perform beyond expectations (Krishnan, 2005; Yukl & Mahsud, 2010).

Northouse (2001) sums transformational leadership as, the ability to get people to want to change, improve, and be led. Meta-analyses reveal that transformational leadership is correlated with more positive work outcomes than any other leadership style (Lai, 2011).

Bass built the concept of this leadership around four behavioural components namely, individualized consideration, idealized influence, intellectual stimulation, and inspiration motivation (Madhu & Krishnan, 2005).

Individualized consideration: This is more of a different strokes for different folk's approach where leaders believe no two people are the same and so, tailor leadership approaches to reflect the unique differences in each follower (Sarwar, Mumtaz, & Ikram, 2015). Transformational leaders recognise and understand individual differences in the form of needs and desires, and make a conscious effort to build an attentive relationship with each individual; by acting as a coach or mentor and paying specific attention to each individual's need (Bass, 1985). They also exert maximum effort in ensuring they address each individuals unique needs for attainment and growth (Bass, 1991; Bass et al., 2003). By so doing, they develop subordinates in a supportive climate to higher levels of potential, which propels them to perform to exceed expectations (Walumbwa et al., 2005).

Idealized influence: This is sometimes referred to as charismatic leadership (Bono & Judge, 2004). It portrays the extent to which leaders are capable of being role models to their followers, by demonstrating solid moral and ethical principles (Avolio & Bass, 1995; Lai, 2011). Leaders earn the respect admiration and trust of their followers (Bass & Riggio, 2006; Ling & Ibrahim, 2013). This is basically because, they act in ways that are just and ethical and share risks with followers instead of opting for the easiest option (Boerner, Eisenbeiss, & Griesser, 2007). Their moral commitment acts a guiding principle. Hence, they always strife

to look and go beyond personal benefits or short term organizational benefits. with respect to occupational safety, leaders exhibiting idealized influence, are likely to demonstrate their values of the importance of employee safety, rather than allowing themselves to be pressured to act in ways that are personally or financially profitable for their organization (Sivanathan, Turner, & Barling, 2005). They also inspire employees to achieve goals that transcend their own self-interests, and cause employees to identify with them. They articulate a vision that followers see as worthy of their effort, and behave in a fair manner inspiring trust and respect from followers (Bass et al., 2003).

Intellectual stimulation: This refers to the extent to which leaders question assumptions, challenge ideas, and suggestions of followers as well as the status quo (Sarwar et al., 2015). Leaders stimulate and boost the creativity of followers by providing a framework for followers to see how they connect to the leader, the organisation, each other, and the organizational goal. By so doing, followers creatively overcome many obstacles (Odumeru & Ifeanyi, 2013). Again, they also challenge followers to think critically and further provide them with challenging new ideas, by encouraging them to break away from old ways of thinking (Avolio et al., 1999). Consequently followers always strive to look at old problems in a new way. Leaders do not mock or publically criticise faults of their followers (Bass & Avolio, 1994). subsequently employees put extra effort on the job, and also spend more time on their work basically because, they engage in experiments and try to rethink the way they perform their work in order to attain a higher performance (Avolio, Zhu, Koh, & Bhatia, 2004; Sarros, Cooper, & Santora, 2008).

Inspirational Motivation: This refers to the leaders' ability to formulate and articulate a clear vision that followers can aspire and seek to attain (Bass & Bass, 2009). This is achieved by motivating, inspiring, encouraging, providing meaning and challenge to work, setting high standards, as well as challenging goals for followers to achieve (Bass, 1985; Shin & Zhou, 2003). Leaders also display optimism and enthusiasm, and further create a sense of team spirit; which encourages employees to achieve organizational objectives, in order to increase performance (Boerner et al., 2007; Hall, Johnson, Wysocki, & Kepner, 2002).

### **2.2.2 Safety Citizenship Behaviour**

Organizations have been mandated to ensure that their workers and working environments are safe. In an attempt to comply with such mandates, stringent measures were put in place which compelled employees to engage in safe working behaviours (DeJoy et al., 2004). It was however realized that, fostering compliance, which encompasses; a control element of meeting minimum safety requirements, and a rigid implementation of safe behaviours; was inadequate and proved to be futile in curbing work related accidents and injuries (Didla et al., 2009). On the other hand, scholars argued that, in order for an organization to realise safety related goals and targets, there was the need for employees to go beyond mandated work requirements (Katz, 1964; Smith, Organ, & Near, 1983). This assertion was found to be especially critical and true for high risk professions and industries. It was observed that, individual active involvement, participation proactiveness, and citizenship towards safety, was more ideal in realizing safety oriented goals (Clarke & Ward, 2006; Didla et al., 2009).

Safety citizenship behaviour (SCB) emanates from organizational citizenship behaviour (OCB). As such like OCB, SCB can be defined as safety behaviours that are discretionary, not directly or explicitly recognized by the formal reward system, which however in the

aggregate, promote the effective functioning of the organization (Xuesheng & Xintao, 2011). Generally speaking there are two safety behaviours or performances people put up at work. These are safety compliance and safety participation. Earlier research findings established a correlation of between 0.47 and 0.64 between safety compliance and safety citizenship behaviour (Neal, Griffin, & Hart, 2000). However as mentioned earlier, Safety compliance involves a control element, rigid implementation of rules and policies, and engaging in required safety behaviour.

Safety citizenship behaviour on the other hand is more discretionary. Thus a more identical construct to SCB is safety participation. It is therefore not surprising that with reference to acts of citizenship tailored towards safety, participation is a preferred over compliance. Moreover, it has been proven to be more effective, longer term at reducing workplace accidents and injuries with findings being consistent across various work contexts (Clarke & Ward, 2006; Neal & Griffin, 2006).

Safety participation refers to a broad group of behaviours that support workplace safety, such as helping co-workers with safety-related issues, seeking to promote safety programs demonstrating initiative, making suggestions for change, voluntarily attending safety meetings and improving safety (Inness et al., 2010; Neal et al., 2000). A critical analysis reveals a number of similarities with general organizational behaviours referred to as acts of citizenship (Organ, 1988; Van Dyne & LePine, 1998). Again the above behaviours are evident in SCB, as SCB covers a broad group of behaviours such as stewardship, voicing one's opinions, helping co-workers, whistle-blowing (reporting unsafe acts), initiating safety related workplace change, and civic virtue (Hofmann et al., 2003). It is not out of place to suggest that Safety participation can be referred to as a subset of SCB.

Hofmann et al. (2003) identified six dimensions of SCB and they are as follows, helping, voice, stewardship, whistleblowing, civic virtue, and initiating safety related change. These dimensions bear some semblance to helping, voice and civic virtue dimensions of (OCB). Just as SCB is identical to OCB Podsakoff et al. (2000) also buttressed on the identical nature between safety participation and citizenship behaviours. In their words “similar to safety participation, organizational citizenship behaviours (OCBs) are voluntary work behaviours that hold a positive value to the organization, but are not recognized by the formal reward system. As such, their omission is not generally understood as punishable and they are difficult to promote through formal routes”. Although Safety participation has been extensively researched into, SCB is a fairly new construct. Nonetheless, by virtue of the identical nature of these two constructs, studies in relation to safety participation was used as a point of reference in building arguments towards fostering SCB at the work place.

### **2.2.3 Professional commitment**

Commitment is an organizational and behavioural construct, which has over the years been the focus of several researchers. Surprisingly, majority of these researchers have narrowly focused on organizational and employee commitment, ignoring the role professional commitment plays in organizational and behavioural research (Diefendorff, Brown, Kamin, & Lord, 2002). Professional commitment also known as occupational commitment or career commitment (Carson & Bedeian, 1994; Meyer et al., 1993) although comparatively new, is currently a burgeoning research area among researchers in the field. This is mainly because, it has been identified as a critical factor influencing and determining people’s behaviour at work (Goulet & Singh, 2002; Wang & Shen, 2012).

A profession has been defined by Wang and Armstrong (2004), as an occupation that requires constant special training, and a lot of practices. In view of this requirement, professionally committed individuals view, work as a vital part of life and attach a lot of meaning to both the work itself and colleagues at work (Bogler & Somech, 2004). Vandenberg and Scarpello (1994) defined professional commitment as “a person’s belief in and acceptance of the values of his or her chosen occupation or line of work, and a willingness to maintain membership in that occupation. Wang and Shen (2012), have also referred to Professional commitment as a kind of work commitment that emphasizes the importance of a profession in ones total life. In view of these definitions, Professional commitment indicates; the belief in, and acceptance of professional goals and values, a willingness to exert considerable effort on behalf of the profession, and a strong desire to maintain professional membership (Lachman & Aranya, 1986; Teng, Shyu, & Chang, 2007).

Professional commitment emanated from Meyer et al. (1993) definition of organizational commitment. Erstwhile, most researchers who attempted defining professional commitment did so from a uni dimensional perspective by narrowly focusing on the affective component of commitment. For instance, Aranya et al. (1981) described professional commitment as the attachment people form to their professions. Meyer et al. (1993) however argued that just as organizational commitment is conceptualized as three distinct components; (affective, normative, and continuance) similarly professional commitment should be explained in the same manner. They identified affective professional commitment (APC), continuance professional commitment (CPC), and normative professional commitment (NPC) as dimensions of the construct. Blau (2003) on the other hand identified four dimensions of the concept namely affective, normative, accumulated cost, and limited alternatives. It has been observed that, this in no way deviates from Meyer et al. (1993) conceptualization of the

concept. whereas Blau (2003) presents accumulated cost, and limited alternatives as separate constructs, Meyer et al. (1993) uses continuance commitment to represent a fusion of these two. Due to the parsimonious nature of Meyer et al. (1993) concept, it was adopted for this study.

Affective professional commitment (APC), refers to an identification with, involvement in, and emotional attachment to a profession (Magdalena, 2009; Meyer et al., 1993). Thus people who are affectively committed to their professions, purposefully and consciously choose to remain in the profession. Such professionals go at length to keep up with trends and changes within the profession, attend professional meetings, actively participate in professional activities, and usually subscribe to journals or news items in relation to the professional area (Meyer et al., 1993).

Continuance professional commitment (CPC): This dimension of professional commitment is premised on the individual's recognition and assessment of the material and psychological gains or costs associated with quitting or switching to another profession (Gambino, 2010). Professionals who demonstrate a strong sense of continuance commitment, remain members of the profession because they realise that they have much to lose by quitting. Such individuals may be less inclined to involve themselves in professional activities other than those required to retain membership within the profession (Meyer et al., 1993).

Normative professional commitment (NPC): This is a form of commitment, based on a sense of obligation to the profession. Employees with a strong sense of normative professional commitment, retain professional membership because, they feel they have an obligation to do so. Normative professional commitment more often than not develops because of effective

professional socialisation or the sacrifices involved in becoming a member of a particular profession (Meyer et al., 1993). This is often the case for professions that require special training and a lot of practise (Magdalena, 2009).

## **2.3 Theoretical Framework**

Several explanations can be found in literature that account for the inter-relationships existing between the variables (transformational, and transactional leadership styles, safety citizenship behaviour, and professional commitment) under the study. These include the leader-member exchange theory and the conservation of resource theory.

### **2.3.1 Leader Member Exchange (LMX) Theory**

This theory seeks to explain the various leader-follower exchange relationships, and further attempts to find reasons to explain the role leadership plays in getting employees to go beyond work expectations by engaging in extra role citizenship behaviours. The numerous theories propounded on the concept of leadership can be broadly categorized into two. The first category focuses on the characteristics of effective leaders, and attempts to explain individual, group, and organizational performance outcomes by identifying and examining specific leader behaviours directly related to them. The second category on the other hand, is a relationship based approach which directly concentrates on how one-on-one social exchanges between leader and follower evolve, nurture, and are sustained. This relationship is best conceptualized by the leader-member-exchange theory (LMX) (Graen & Uhl-Bien, 1995).

Leader Member Exchange (LMX), refers to the quality of the working relationship between an employee and his or her immediate supervisor (Dansereau, Graen, & Haga, 1975). It was

originally referred to as the vertical dyad linkage theory. It conceptualizes leadership as a process, that is centred on the interaction or quality of working relationship between leaders and followers, or an employee and his immediate supervisor (Dansereau et al., 1975; Lo et al., 2010). LMX is the most researched and stands tall amongst other leadership theories and this is because, it assess the leader follower relationship from a two way perspective (Krishnan, 2005).

Lunenburg (2010) advanced that leaders treat and relate with all followers in the same manner. LMX on the other hand is based on a working principle that, each leader-follower relationship is unique. It therefore represents a dyadic process that reflects different levels of the relationship to each employee than on the broader group, premised on the belief that, a supervisor has different types of interaction with different employees in the same work group (Graen & Cashman, 1975).

Leader Member Exchange theorists have argued that, time pressures, energy constraints, and work demands of leaders, make it practically impossible for them to give equal attention to all followers. Consequently, key subordinates usually become beneficiaries of close leader follower relationships as and when they do develop (Gerstner & Day, 1997; Graen, 1976). Nonetheless, the nature and quality of these leader-follower relationships are more dependent on Personality factors, implicit theories and self-schemas; than on demographic characteristics like age gender and ethnicity (Engle & Lord, 1997; Murphy & Ensher, 1999).

It has also been observed that, the quality of the relationship developed, which could either be a high or low quality LMX relationship, greatly influences leader follower attitudes and

behaviours (Sparrowe & Liden, 1997). With respect to low quality LMX relationships, leaders develop lower quality economic exchanges with subordinates; predominantly characterized by formally agreed on (contractual), immediate, and quid pro quo transactional exchanges of tangible assets (Madhu & Krishnan, 2005; Maslyn & Uhl-Bien, 2001). On the flip side, with high quality LMX relationships, leaders develop a small number of high-quality relationships, characterized by a higher level of interaction, trust, respect, support and liking (Dienesch & Liden, 1986; Graen & Uhl-Bien, 1995). In such high-quality LMX relationships, responsibilities are often diffused and unspecified, and no measure or value against which gifts, favours, or contributions can be measured is present (Blau, 1964). Again, leaders tend to appeal to the higher-order social needs of followers by getting them to place collective interests over short-term personal gratification (Graen & Uhl-Bien, 1995). Such relationships are often characterised by the exchange of material and nonmaterial goods, that transcend beyond specifications in the contractual job description (Liden & Graen, 1980; Liden, Sparrowe, & Wayne, 1997).

The Leader Member Exchange theory is also premised on notions of social exchange, reciprocity, and equity (Deluga, 1994; Graen, 1976). Which suggests that, there is a perceived obligation on the part of subordinates to reciprocate the relationships they enjoy with leaders (Blau, 1964). LMX research has revealed that the quality of this relationship, is positively linked to the frequency with which followers engage in activities beyond the employment contract (Liden & Graen, 1980; Settoon, Bennett, & Liden, 1996; Wayne & Green, 1993). As such, subordinates who enjoy high quality exchanges with their leaders, tend to engage in citizenship behaviours that benefit their leaders as well as other colleagues (Liden et al., 1997). This is usually done in a bid to sustain a balanced social exchange (Wayne, Shore, Bommer, & Tetrick, 2002). Consequently, the better the quality of the leader follower

relationship, the higher the degree of citizenship behaviour exhibited by the follower (Lunenburg 2010).

Leader behaviour have also been found to be important antecedents of LMX relationships (Yukl, O'Donnell, & Taber, 2009). It is therefore not surprising that, extant literature on leadership behaviours and LMX relationship has emphasized the role that a leaders behaviour plays in the development of LMX relationships (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007).

According to Graen and Uhl-Bien (1995), LMX relationships could either be transactional or transformational, explaining that; highly effective LMX relationships results in the emergence of transformative behaviours for both parties. Wang, Law, Hackett, Wang and Chen (2005) provide evidence for this assertion in their study of LMX as a mediator for transformational leadership in organizations throughout China. They described transformational leadership behaviours as a social currency that affects stronger dyadic relationships. They also correlated transformational leaders' high-quality LMX relationships with more effective task performance, increased citizenship behaviours, and increased willingness amongst followers to take on extra roles and change how they do their jobs. According to Wang et al. (2005), "LMX makes transformational leadership more personally meaningful" for the follower. Wang et al. (2005)'s findings are consistent with Truckenbrodt (2000), who found that high-quality LMX relationships are antecedents for increased commitment and both altruistic and compliant citizenship behaviours.

Studies and assertions by other scholars have also demonstrated that LMX is an important element that explains the effect of leader behaviours on subordinate outcomes. For instance According to Hofmann and Morgeson (1999) when transformational leadership style is fused

with a high quality LMX, employee safety concerns at work is bound to increase, which causes an improvement in safety commitment and communication. LMX relationships also suggests that employees are likely to engage in extra role behaviours in relation to safety when they have high quality exchange relationships with their leaders, more likely a transformational than a transactional leader (Hofmann & Morgeson, 1999; Hofmann et al., 2003). This is because LMX is based on transforming relationships and exchanges when trust mutual respect is established. When employees believe they enjoy high quality relationships with their leaders they are likely to engage in extra role behaviours, more especially in high risk settings. LMX relationships goes a step further, to even affect how employees define their roles within organizations. Employees who enjoy high quality leader member exchanges are likely to view extra role behaviours as obligatory roles (Hofmann & Stetzer, 1996). This ultimately results in SCB and contributes to reduced incidents of accidents in the workplace. Hofmann et al. (2003) also opine that generally, high quality LMX relationships are associated with a wide range of safety behaviours including increased subordinate safety commitment, fewer accidents, and increased safety communication. In high risk working environments however, such subordinates are likely to expand their safety citizenship role definitions to include broader range of safety behaviours. They further argued that LMX can even effect how employees define their role in relation to safety, such that those who enjoy high quality leader follower exchange relationships were more likely to perceive safety as a part of their job responsibility or obligation.

Employees tend to place emphasis or premium on work requirements that are considered critical. since in safety settings or high risk jobs safety is a valued behaviour, it is expected that employees who have high exchanges with their leaders will naturally engage in safety behaviours (Hofmann et al., 2003).

A positive association between leadership and SCB is expected because, SCB helps fulfil the reciprocity obligations of followers, and represents an exchange currency that is diffused, unspecified, and weakly time-bound. It is likely that subordinates will go beyond required in-role behaviour and engage in citizenship behaviour in order to maintain a balanced or equitable social exchange (Wayne et al., 2002). Consistent positive associations between LMX and citizenship behaviours in general have been established (Liden et al., 1997; Wang et al., 2005). In line with this it was hypothesised that:

*H1a: Transformational leadership style will have a positive relationship with SCB*

*H1b: Transactional leadership style will have a positive relationship with SCB*

### **2.3.2 Conservation of Resource Theory**

The conservation of resources theory propounded by Hobfoll (1989) postulates that, human beings by nature, constantly strive to conserve resources other than deplete them. SCB requires the use of personal resources (time, energy and effort), which are unrecognized. Going out of your way to ensure the safety of others, is associated with personal risk and comes at a cost. A natural expectation is that, it will be very difficult to find employees participating in safety when they have competing demands for their limited resources (time and energy). A study conducted by Griffin and Hu (2013) to examine the impact of specific leader behaviours on employee's safety performance among Australians from various occupations and work roles revealed that safety monitoring similar to management by exception (transactional leadership) showed insignificant results with safety participation.

## **2.4 Empirical Review**

### **2.4.1 Leadership styles and Safety Citizenship Behaviour**

According to Lam and O'Higgins (2012) transformational and transactional styles of leadership, can be likened to Maslow's theory on the basic needs of man. Thamrin (2012) further postulates that, a transformational leadership style is ideal to meet higher level employee needs such as dignity and self-actualization, whereas a transactional leadership style is deemed appropriate to meet employee low level physical needs such as safety. Contrary to this assertion, there is considerable empirical evidence suggesting that, both transformational and transactional leadership theories are appropriate and critical for the effective management of employee safety (Cooper, 2015; Kelloway, Turner, Barling, & Loughlin, 2012; Lekka & Healey, 2012).

Extant literature has revealed strong positive associations with a variety of safety outcomes consistent across various cultures and industries over the last couple of years. These include reduced accidents and injuries, increased employee safety behaviours, as well as an increase in safety compliance, and safety participation behaviours (Clarke, 2013; Inness et al., 2010; Mullen & Kelloway, 2009). For instance Clarke and Ward (2006) in a study to examine leader influence tactics and employee safety behaviours reported that, tactics in line with transactional leadership style had a significant impact on employee safety participation. Similarly Barling et al. (2002) in a study on leadership and safety, focusing on accidents and injuries also reported positive correlations between transformational leadership and increases in employee safety behaviour. This was re tested by Inness et al. (2010), and similar findings were reported.

Although both styles of leadership are considered efficient for the effective management of safety. Literature on transformational leadership dominates research focus (Barling et al., 2002; Christian et al., 2009; Den Hartog et al., 1997). This could perhaps be attributed to the fact that over the past 30 years transformational leadership has been the most studied and debated idea within the field of leadership (Eid, Helge Johnsen, Bartone, & Arne Nissestad, 2008; Lowe & Gardner, 2001). Extant literature further reveals that, transformational leadership style records a more significant positive relationship with a variety of safety outcomes as compared to transactional leadership style, with research findings confirming consistent and strong positive relationships with a variety of safety outcomes (Barling et al., 2002; Christian et al., 2009). For instance findings from Sønnderstrup-Andersen, Carlsen, Kines, Bjørner, and Roepstorff (2011) have revealed that, both styles of leadership are positively correlated with management safety empowerment (facet of safety climate) however, transformational leadership recorded an additional significant positive relationship with workers safety priority.

Hoffmeister et al. (2014) went a step further to test the individual facets of transformational and transactional leadership styles to determine specific leadership facets which encouraged safety behaviours. Their findings revealed that with the exception of active management by exception (transactional in nature), all individual facets of transformational and transactional leadership was positively correlated to one safety outcome or the other. Another interesting finding was that, idealized attributes and idealized behaviours in line with transformational leadership style, consistently emerged as the most important predictor of safety participation at work.

Current trends in leadership and work safety research have focused on behaviours employees put up at work (Weick et al., 2008). This is because, it has been established that contrary to previously held assumptions, employee behaviours rather than technical factors are major determinants of accidents and injuries at work (Wehrich et al., 2008). This realization, coupled with statistics in relation to safety, point to the fact that employers cannot be fully relied upon to guarantee the safety of their employees. Employee proactiveness and citizenship is now critical. Research findings have also consistently shown that proactive employee behaviours yield better results in comparison to forced or mandatory ones. These assertions apply to safety as well because, citizenship behaviours put up at work can be safety specific or tailored towards safety.

The quest by scholars to research more into employee safety performance at work, have pointed to two major safety behaviours employees put up at work. These are safety participation and safety compliance (Neal & Griffin, 2006). Although both play a critical role in fostering safety at work, safety participation is a more preferred choice as consistent findings reveals that, it yields better results as compared to safety compliance. (Clarke & Ward, 2006; Didla et al., 2009). This could be attributed to the fact that safety participation is more discretionary, safety oriented, voluntarily driven and altruistic. A careful examination reveals that it is quite similar to a voluntary safety construct known as safety citizenship behaviour (SCB). This is because Safety participation refers to a broad group of behaviours that support workplace safety such as helping workers with safety-related issues, seeking to promote safety programs, demonstrating initiative, making suggestions for change, voluntarily attending safety meetings, and improving safety (Inness et al., 2010; Neal et al., 2000). SCB per Hofmann et al. (2003) also refers to workplace safety behaviours such as safety related helping, voice, stewardship, whistleblowing, safety-oriented civic virtue, and

initiating safety related work place change. Hofmann et al. (2003) reveal that unlike SCB, safety participation has been fairly researched into. Nonetheless, these two constructs are quite identical as they both fall within the scope of citizenship behaviours. This is further supported by Podsakoff et al. (2000); Stamper and Dyne (2001); and Van Dyne and LePine (1998).

Several studies have reported varying findings on the relationship between transformational and transactional leadership styles and safety citizenship behaviours. In view of this results are inconclusive (Flin & Yule, 2004; Griffin & Hu, 2013; Mullen & Kelloway, 2009). For instance Clarke and Ward (2006) in examining the effects of leader influence tactics on employee safety in the UK, used structural equations modelling to assess a broad group of general leadership tactics on a variety of safety outcomes. Interestingly safety participation emerged as the safety outcome in the model. This demonstrates the significant influence leaders may exert not only in ensuring that employees comply with rules and procedures, but also in encouraging the extra effort required by employees to engage in safety participation. The findings also highlighted the role of rational persuasion, a leader influence tactic more aligned with transactional than transformational leadership, in enhancing safety participation. Rational persuasion connotes a leader's respect for subordinates' ability to understand leadership objectives, recognition of their technical knowledge, and a desire to strengthen leader subordinate relations. Thus the use of such tactics had a potential of encouraging employee participation or involvement in safety.

This finding was consistent with the results from a study by Tepper, Eisenbach, Kirby, and Potter (1998), which suggested that a leader's use of rational tactics (such as rational persuasion or cost and benefit exchanges) and "soft" tactics (such as inspirational appeals)

signals respect for subordinates' abilities to understand managerial objectives, recognition of their technical knowledge, and further communicate a desire to strengthen leader-subordinate relations. Thus, the use of such tactics in a high risk environment had a huge impact in encouraging employee participation and involvement in safety, and further strengthening feelings of trust in leaders.

Interestingly earlier researchers' Yukl, Kim, and Falbe (1996) linked rational persuasion which is a cost benefit exchange relationship to an element of commitment called target commitment. Explanations they gave to this concept connote commitment to a task job or work. That is to say, the use of rational persuasion encourages employee commitment to a task. This is an attestation to Zacharatos, Barling, and Iverson (2005) assertion that, the use of commitment oriented leadership which is currently a leading practice, could be associated with improved safety provided safety is embedded within the job, task, or is made an organizational target.

Furthermore, Kapp (2012) in a study to evaluate the influence of leadership practices of supervisors on the safety participation behaviour of employees in manufacturing and construction firms, amongst 533 employees of European, African American, Hispanic, and other unspecified racial groups discovered that, greater levels of transformational and transactional leadership of front line supervisors were associated with greater levels of safety participation in employees, thus a direct positive relationship was observed. He however failed to identify specific factors within the participants or organization which could have facilitated the leadership safety participation relationship. This left the question as to what factors, if any, influence the leadership-safety participation relationship unanswered. Kapp (2012) however mentioned that there could have been some factors linking the leadership

safety participation relationship and further speculated that, factors at the organizational level such as ethical climate could be responsible, or conceivably characteristics at the individual level such as altruism or the good Samaritan effect better known as citizenship behaviours, could have exerted a moderating influence on the leadership-safety participation relationship. Kapp (2012) failed to identify these specific factors he therefore made a call for future studies to look into the effects these organizational, and or individual factors could have on the leadership safety participation relationship.

Griffin and Hu (2013) also conducted a study to examine the impact of specific leader behaviours on employee's safety performance among Australians from various occupations and work roles. Path analysis revealed that safety inspiring, similar to inspirational motivation of transformational leadership promotes safety participation. On the other hand, safety monitoring similar to management by exception (transactional leadership) showed inconclusive results with safety participation. Zohar (2002) also looked at two dimensions of transactional leadership; management by exception active (MBEA) and management by exception passive (MBEP). He reported consistent positive significant relationships between (MBEA) and a variety of safety behaviours. Still reporting on transactional leadership, he observed consistent significant negative relationships between (MBEP) and safety participation.

Griffin and Neal (2000) also termed transactional leadership as compliance motivation and similarly reported a negative relationship with safety participation. (Clarke, 2013) on the other hand however reported an indirect positive relationship between transactional leadership and safety participation. Griffin and Hu (2013), however raised an argument that ,there could have been some moderating or mediating factors responsible for the inconsistent

findings between transactional leadership and safety participation; and by introducing a variable known as safety learning there finally appeared to be some relationship between transactional leadership and SCB. Although results on the transformational, and transactional leadership-safety relationship appear to be inconclusive, majority of studies reveal a more positive relationship between transformational leadership and SCB (Hofmann & Morgeson, 1999).

Although not specifically addressing the relationship between leadership styles and safety citizenship behaviour, Hofmann et al. (2003) in using participants from the US army in examining leader member exchanges with SCB, obtained results which confirmed that, employees chose to perform safety citizenship behaviours when they enjoyed high quality exchange relationships, more likely to be transformational than transactional with their superiors. This comes as no surprise because there are a number of theoretical statements suggesting that transformational leadership should increase the likelihood of citizenship behaviours by followers. For instance Bass (1985), and Bass and Stogdill (1990) have stated that, transformational leadership should result in more engaged, more devoted, and less self-concerned employees, as well as in workers who perform beyond the level of expectations. Also theoretical conceptualizations of transformational leadership points to the fact that it has direct significant effects on the motivation, and commitment behaviours of employees which drives them into putting in extra efforts known as acts of citizenship on the job or work (Yukl, 1989). For instance Conger and Kanungo (1998) have opined that by creating a positive vision of the future of the organization, transformational leaders motivate employees to work and go beyond job descriptions to engage in extra roles in anticipation of that glorious organizational future.

In addition to the above, transformational leadership positively predicts extra effort, and performance beyond expectations, along with higher levels of commitment (Avolio, Zhu, et al., 2004). Studies have also reported positive correlations between transformational leadership dimensions and extra effort (Yammarino & Bass, 1990). For instance, findings from empirical research on transformational leadership style on citizenship behaviours conducted by Kara, Uysal, Sirgy, and Lee (2013), on 1,100 employees from 30 organizations in Korea revealed that, transformational leaders have a direct and significant impact on the citizenship behaviour of employees, in that they skilfully motivate employees to go beyond work requirements. This confirms Bass (1985) assertion that, transformational leaders motivate followers to do more than they are originally expected to do. Other empirical research on the transformational leadership, citizenship behaviour in relation to organizational behaviour done by Qaiser Danish, Aslam, Cheema, and Hassan (2014) amongst employees from different sectors in Pakistan resulted in findings that reaffirmed the predicted nature of transformational leadership on employee citizenship behaviour.

It has been advanced that generally, followers have a strong identification with leaders who are transformational; and more often than not, more likely or willing to exert extra effort in the discharge of their duties for the sake of their leaders (Krishnan 2005). It is therefore not surprising that empirical findings are consistent with this assertion. Based on the review above the following were speculated.

*H1a: transformational leadership style will have a positive relationship with SCB*

*H1b: transactional leadership style will have a positive relationship with SCB*

#### **2.4.2 Professional Commitment and Citizenship Behaviours**

It has been advanced that, the attitude and behaviour employees put up towards work is greatly influenced by the degree of commitment they demonstrate towards their profession (Meyer et al., 1993). Despite this assertion very little attention has been paid to the role commitment plays in fostering citizenship behaviours at work; as majority of studies have focused on leadership and personality factors (Diefendorff et al., 2002).

Cohen and Kol (2004) have indicated that professionalism leads to some levels of altruism, which promotes citizenship behaviours, especially when the dimension of professionalism is used as a referent. This is in line with Meyer et al. (1993) who demonstrated that, some behaviours put up at work are dependent on the relative importance of the act of citizenship to the profession. In using health professionals as an example, they argued that, saving lives is the core mandate of the profession hence, in as much as health professionals may go the extra mile in discharging their duties which may be seen as acts of citizenship, it lies within the core competency and requirement of the profession.

Meyer et al. (1993) went a step further to test the 3 components of professional commitment (PC) and reported that affective and normative professional commitment were positively related to citizenship behaviours at work. They however reported an insignificant relationship for continuance commitment and citizenship behaviours.

These findings are parallel to assertions by Bogler and Somech (2004) that, for a person who is professionally committed, work is meaningful and forms a vital part of the individuals life, as such holds the job as well as colleagues dear to his or her life. This is again in congruence with Bass (1985), who opines that when a profession or job is perceived as meaningful and

significant, it is likely to result in extra effort. Going by these assertions, there is a high probability that, in high risk industries, employees will go the extra mile and engage in acts of citizenship pertaining to their profession or fellow colleagues, when they consider their professions as meaningful or useful.

Duarte (2015) in demonstrating how professional commitment is related to citizenship behaviours, chose to sample nurses from two hospitals in Portugal. Using factor analysis, data collected proved that indeed the level of professional commitment of nurses was strongly related to their citizenship behaviours. The degree of reliability of findings in this study led the researcher to comment on the importance of the inclusion of professional commitment in exploring citizenship behaviours models. This proposition is in congruence with Lee et al. (2000) who had earlier stressed the importance of studying professional commitment. They further argued that, an individual's profession or career had the propensity to play a major role in one's life. Similarly, Meixner and Bline (1989) validated these arguments and further advanced that, professional commitment had individual and organizational implications which could be linked to several positive work outcomes.

It has been argued that, the relative influence of professional commitment is determined by the perception of how important the behaviour in question is to the profession, with affective professional commitment (APC) appearing in regression models as the most prominent variable explaining the largest proportion of variance in citizenship behaviours followed by normative professional commitment (NPC). In Duarte (2015) study, continuance professional commitment (CPC) interestingly however, did not play a significant role in the PC, citizenship behaviour relationship. In a similar study by Leite (2007) among Portuguese nurses, it was hypothesized that there would be no significant relationship between CPC and

citizenship behaviours. This was however refuted as there appeared to be some link between affective and continuance professional commitment and citizenship behaviours. Duarte in 2015 reported that works on professional commitment and citizenship behaviours are scarce as most researchers focus on leadership and satisfaction in assessing citizenship behaviours. He further supported Cohen (2006) assertion that, although a lot has been done in the area of citizenship behaviours and organizational commitment, commitment to an organization and commitment to a profession were quite distinct, in the sense that, an individual could be professionally committed without necessarily being committed to an organization. Thus, it would be a huge flaw to generalize findings from organizational commitment and citizenship research to ignorantly assume the same holds for professional commitment. They unanimously affirmed that APC has a positive significant relationship with citizenship behaviours. They also opined that NPC and CPC could lead to citizenship behaviours. In this instance, engagement in the citizenship behaviour in question, is largely determined by how important the said behaviour is to the profession as compared to its importance to the organization. Meyer et al. (1993) also reported that, affective and normative professional commitment are positively linked with citizenship behaviours at work however for continuance professional commitment the relationship found was not statistically significant.

The idea that a profession is one requiring continuous education has been continuously debated among scholars. The fact however remains that professional commitment increases with increase in education. Jeffrey, Weatherholt, and Lo (1996) in a study involving Taiwanese accountants reported that professional commitment did increase with educational status and rank and even in examining professional ethics, results confirmed that professional commitment may even influence the level of ethical reasoning of professionals.

Cohen and Kol (2004) in their study among Israeli nurses similarly reported that, professionalism and citizenship behaviours varied with educational status. It was observed that nurses with higher educational background demonstrated higher professionalism and citizenship behaviours. They made a call for this relationship to be tested along other professional areas. Wang and Shen (2012) responded to this call and in testing professional commitment levels among Chinese project management professionals using factor analysis, similarly reported that higher levels of professional commitment corresponded with higher levels of education and job position. In line with the above findings, the following speculations were made;

*H2: Employee professional commitment will have a significant positive relationship with SCB*

*H2a: There is a positive relationship between affective professional commitment and employee SCB*

*H2b: There is a positive relationship between normative professional commitment and employee SCB*

*H2c: There is a positive relationship between continuance professional commitment and employee SCB*

#### **2.4.3 The moderating role of professional commitment**

Commitment has been speculated to be a critical factor that facilitates organizational effectiveness in this current business world of competitiveness. As such organizations are preoccupied with identifying workforce who are committed (Riaz et al., 2011). Leadership and style of leadership have also been widely speculated to be one of the most important

predictors of the general commitment behaviour of employees (Ramachandran & Krishnan, 2009).

Individuals are more likely to attach value, importance and a deep sense of commitment to their professions when their leaders exhibit leadership styles that enhance and encourage goal achievement and attainment as well as goal striving behaviour. According to Riaz et al. (2011), transformational leaders encourage employee affective professional commitment. This is by virtue of the fact that they display optimism, high expectations, positive outlook, and have an ability to focus the attention of their employees on an abstract long term vision (Hamstra, Van Yperen, Wisse, & Sassenberg, 2015). Transactional leaders on the other hand are more likely to encourage normative and continuance professional commitment. This is because transactional leaders encourage followers and build in them a strong sense of obligation and responsibility stressing rules and having a preference for stability. Ling and Ibrahim (2013) in testing the effect of transformational leadership on the commitment levels of teachers, using a sample of 1,014 teachers in 27 schools in Malaysia, recorded partial linear correlations between transformational leadership and general commitment behaviour among teachers, with commitment towards the profession recording the most significant positively correlated value. They went a step further to test individual facets of transformational leadership to identify specific leader behaviours that encouraged professional commitment. Idealized influence and inspirational motivation recorded the highest mean scores. This confirms theoretical assumptions that leaders who instil pride and respect, earn the admiration of their followers; who end up putting in more than the needed effort required for the discharge of work duties (Lai, 2011).

It is highly probable that, the style of leadership adopted by a leader, goes a long way in fostering professional commitment behaviours among employees (Ling & Ibrahim, 2013). It

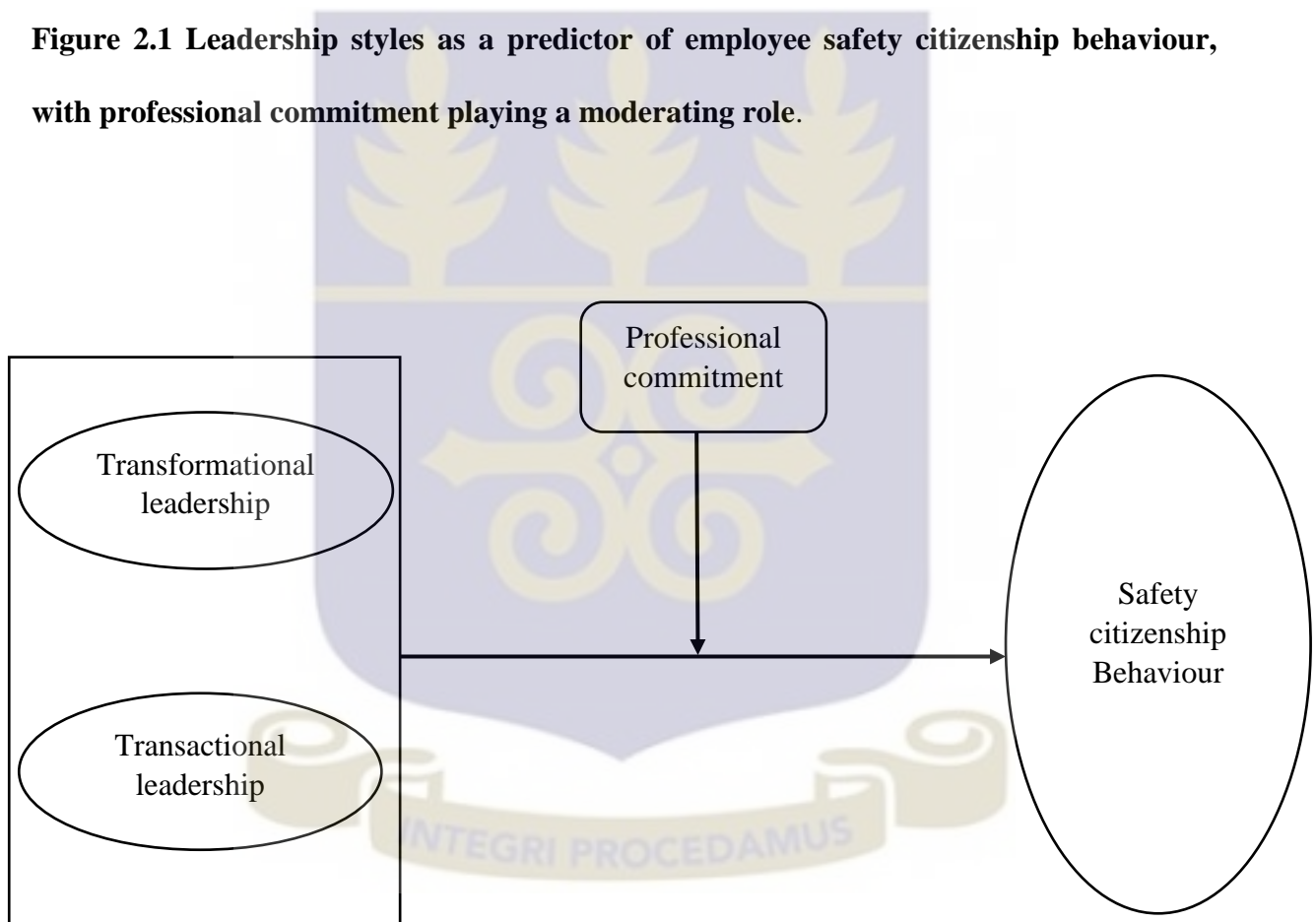
is also an established fact that leadership has some relationship with employee safety citizenship behaviours (Didla et al., 2009; Hofmann et al., 2003). It has further been demonstrated that professional commitment has the propensity to elicit citizenship behaviours (Cohen, 2006; Cohen & Kol, 2004). Inferring from the relationships above, it appears that professional commitment could act as some form of a mediator in the leadership and safety citizenship professional commitment relationship. However extant literature available is inadequate to build arguments in line with a leadership style, professional commitment relationship for mediation to hold. On the other hand, there is ample evidence, to conceptualize a leadership style, SCB, professional commitment relationship, with professional commitment acting as a moderator.

In line with Baron and Kenny (1986) justifications of moderator, mediator roles, this study treats professional commitment as a moderator. Studies by Didla et al. (2009), Griffin and Hu (2013), Hofmann et al. (2003), and Neal and Griffin (2006) have demonstrated relationships between leadership styles and SCB, with transformational leadership reporting consistent positive relationships, and transactional leadership reporting inconclusive results. Studies have advanced that employees are bound to be professionally committed when the behaviour in question lies within professional ethics and conduct (Meyer et al., 1993). It is expected and conceptualized that, this relationship will hold for the study. The citizenship behaviour in question is safety, and this is embedded in the professional code of conduct for technical workers and engineers. A general expectation is that, participants for this study will display a significant degree of professional commitment which will be significant enough to moderate the leadership safety citizenship behaviour relationship.

#### 2.4.4 Conceptual Framework

In view of the theoretical, and empirical review above a conceptual model was developed to conceptualize the numerous relationships that exist. The conceptualized model posits that style of leadership adopted by a leader will influence employee safety citizenship behaviours. However, the relative strength or weakness of this relationship will be moderated by professional commitment.

**Figure 2.1 Leadership styles as a predictor of employee safety citizenship behaviour, with professional commitment playing a moderating role.**



**Source: Author**

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter of the study is the general methodological framework that the study adopted. In any research undertaking, it is necessary to know the kind of information the researcher seeks to collect or the precise phenomenon the researcher seeks to investigate, as this is usually the first step in determining how the study should be carried out. Having this in mind, this chapter describes the approaches, procedures and techniques used to gather the data needed to achieve the desired research objective. According to Lewis, Thornhill, and Saunders (2007), research is carried out with an intent to discover things in a procedural or methodological manner. In accordance with this assertion, this chapter gives an overview of how the research was conducted in systematic sections namely. The research paradigm, research design population, sampling, data sources and instruments, reliability, data analysis and ethical considerations.

#### **3.2 Research Paradigm**

According to Dash (1993) the rationale behind educational research is to explore and understand social phenomenon. However, in conducting research, critical questions come up which ought to be investigated into. Moreover, people give different interpretations to social reality, therefore when conducting research there is the need to have some guiding principles by which research problems are identified, defined and analysed. These guiding principles are the world view or philosophical assumptions of the researcher, which are broadly termed as paradigms (Guba, 1990). According to Taylor, Kermode, and Roberts (2007) a research paradigm is “a broad view or perspective of something” (p. 5). Elaborating further, Kuhn (1970,p.175) referred to it as “a set of beliefs, values, and techniques, shared by members of a scientific community, which acts as a guide or map, dictating the kinds of problems scientists should address and the types of

explanations that are acceptable to them". Due to the remarkable progress made in the social sciences several paradigms have evolved over the years these include constructivism, pragmatism, advocacy and post positivism (Creswell, 2009).

For the purposes of this study the post positivism approach was adopted. According to Mackenzie and Knipe (2006); and (O'Leary, 2004) an assumption underlining this paradigm is that, research is conducted based on theories; to either confirm or disprove them. Another assumption is that the phenomenon of study can be reduced into fragments, which can then be practically tested by the use of objectives and research hypotheses. In addition, findings from the post positivist assumption are solicited from an objective point of view (Creswell, 2009). These assumptions are in congruence with the assumptions underlying the current study.

This study examined the predictive nature of leadership styles on employee safety citizenship behaviour of employees, and further examined the moderating role professional commitment played in this relationship. Moreover, this study developed research questions, objectives, as well as the necessary hypotheses in line with empirical data. Again, the researcher used relevant questionnaires to collect data which in accordance with Creswell (2009), represents a more objective approach to research. Finally, to establish a theoretical basis for the study, the researcher identified various related theories such as the leader member exchange theory, and the conservation of resource theory.

### **3.3 Research Design**

According to Walliman (2006), research design refers to a blueprint that is used to integrate all components of a study, to facilitate a logical way of addressing a research problem as unambiguously as possible. Simply put, it refers to the overall plan that a researcher uses for an empirical research (Punch, 2013). Ployhart and Vandenberg (2010) assert that, research could

either be cross sectional or longitudinal. In addition, a qualitative, quantitative, or mixed methods approach could also be adopted. The decision to choose any of these designs however, is primarily informed by the objectives of a study (Creswell, 2013).

In this study, the researcher sought to investigate the relationship between certain variables within the industry selected for the study. Thus, the quantitative cross-sectional survey design was adopted. Scholars have asserted that a quantitative approach is used to test objective theories (Creswell, 2009). More so, this is done by postulating hypotheses, employing empirical methods, as well as empirical statements in collecting numerical data, and further analysing using mathematically based methods to either confirm or refute the hypotheses (Creswell, Hanson, Plano, & Morales, 2007). Consequently, research results are relatively independent of the researcher. Thus, more likely to be accurate and reliable (Bhattacharjee, 2012).

Being one of the strongest ways to approve or disprove a hypothesis, a quantitative approach is a more preferred approach, when the variables in a study can be measured in terms of quantity (Kothari, 2004). In an attempt to quantify the variables under study, three scales in the form of close ended structured questionnaires were used in the collection of data for statistical analysis.

The study also adopted a cross sectional survey design. Babbie (1990) describes this, as a survey carried out at one point in time, which entails the collection of data on more than one case out of a population; which gives a snapshot or cross section of the ideas, information, or opinions of a population as it stands at the time of the study. Moreover, it allows for numeric descriptions and comparison of different variables at the same time. For instance, age, gender as well as educational levels. This design, further permits the record of information of subjects without manipulating the research environment. Additionally, when enough cases that are representative of the population is sampled, it allows conclusions about phenomena across the breadth of the population to be drawn.

A cross sectional survey is relatively inexpensive and takes little time to conduct. Hence, it is usually adopted when the research is time bound and there are cost constraints (Walliman, 2011). Owing to the time and cost limitations of this study, questionnaires were distributed to research participants between December 2015 and April 2016. With cross-sectional designs, information can also be gathered from different groups, to investigate the differences between the subgroups at the same time period. This design allows for more investigation into the topic and explores possible directions for further research.

### **3.4 Population**

Kumekpor (2002), describes a study population as the total number of units of the phenomenon to be investigated that exists in the zone of investigation. The target population for this study included all engineering, technical, and maintenance staff of power distribution companies taxed with the dissemination of power within southern Ghana; this is because the job description of these technical departmental units predisposes workers to safety hazards (Bosak, Coetsee, & Cullinane, 2013). The electricity company of Ghana is the only company in Ghana that disseminates power through southern Ghana in addition current power crisis in Ghana has predisposed workers to enormous pressure. Thus, it was selected for the study.

### **3.5 Eligibility Criteria**

The inclusion of respondents in the study was based on the fact that, they were first and foremost employees of a major power distribution company taxed with dissemination of power within southern Ghana. However, due to the nature of the variables as well as the objectives of the study, it was required that all the respondents have a leader or supervisor to whom they report. Additionally, since questionnaires were adopted as the main instruments for data collection which required the ability to understand the questions in order to respond appropriately, it was also required that participant's possessed the ability to read and write the English language. In

effect, employees lacking the ability to read and write were excluded from the study. The pilot study conducted earlier revealed that a number of respondents, specifically low level staff, had some challenges with reading and writing. However, the majority of employees generally had a fair command over the English language; thus able to read and write satisfactorily. This challenge however led to a decrease in size of the targeted population.

### **3.6 Sampling and Sample Size**

It is a daunting task for a researcher to study everybody in a population. The basis for sampling, is to obtain a hopeful representation of the population. Sampling refers to the statistical process of selecting a subset from a population of interest, for purposes of making observations and statistical inferences about that population (Bhattacharjee, 2012). It is critical to select a sample that is a true representation of the study population, in order to extend implications beyond the participants of the study, for generalizations to be made (Creswell, 2012). Bartlett (2001); and Kotrlik and Higgins (2001) propose that a sample size is determined either by direct calculations through statistical formulas relevant to the study, or by making reference to tables with recommended sample sizes based on the population under consideration.

The sample size for the study, was obtained from Krejcie and Morgan (1970) table for determining sample size from a given population. No calculations were needed to use Krejcie and Morgan (1970) table for determining sample size from a given population. Therefore, out of an estimated population of 320 artisans, technical, and engineering staff of Accra East, West and Tema districts of the Electricity Company of Ghana, a sample size of 175 is considered ideal per specifications of the table. 260 questionnaires were however distributed whilst 209 were retrieved from respondents, representing an 80.4% response rate. 12 questionnaires were however discarded because they were not properly filled thus 197 questionnaires were used for analysis.

Babbie (1989) argues that for a survey, a response rate of at least 50% is considered adequate while 70% – 89% is considered very good. The sample size obtained for the study constituted artisans, technical as well as engineering staff, involved in a variety of activities relating to power distribution.

### **3.6.1 Sampling technique**

Sampling is very critical in research because, the extent to which a study can be generalized or otherwise is predominantly determined by how accurate or representative the chosen sample is of the population under study. Thus, for issues of validity, it is of utmost importance to pay critical attention to sampling techniques chosen for a study (Shavelson, 1988). Non probability sampling techniques were selected for this study. This is in view of the fact that, the setting for the study was West Africa; specifically Ghana, where attitude towards research and filling of questionnaires in particular is very poor (Amponsah-Tawiah, Dartey-Baah, & Amertorwo, 2012). Moreover, the researcher had no control over the study population. Hence, could not mandate or force any participant to participate in the study. Considering these sensitivities at hand, it was practically impossible to adopt probability sampling techniques.

The purposive sampling technique was used to select the study sites specifically offices within the Electricity Company of Ghana, supervised directly from the capital city of Ghana (Accra). It is interesting to note that the regional and district demarcation of the ECG does not adhere to the National regional demarcations. Therefore a number of offices located outside Accra fall within the company's demarcation but not the National geographical demarcation. For instance, offices at Nsawam and Mampong are nationally demarcated as Central, and Eastern region respectively. However, within the classification of the company, these offices fall within the Greater Accra Regional boundary. The convenience sampling technique was then used to acquire the individual

respondents from each company. These are non-probability sampling methods since the probability of selecting each respondent was very difficult to determine (Kothari, 2004).

### **3.7 Type and Source of Data**

Primary and secondary data sources were used for this study. Primary data sources were obtained from Makola, Teshie, Mampong, Dodowa, Kwabenya, Legon, Avenor, Kaneshie, Korlebu, Dansoman, Bortianor, Nsawam, Tema, Nungua, and Ada, district offices of ECG, with the help of close ended questionnaires which cut across Safety citizenship behaviour, transformational, and transactional leadership, and professional commitment variables, used in the study.

### **3.8 Data collection Instrument**

A structured close ended questionnaire was used to collect primary data for the study. According to Walliman (2011), the use of questionnaires in quantitative research comes with many advantages, and this formed the basis of its use in the current research. Such advantages include; its flexibility to allow for a relatively large sample size ( $N = 197$ ) to be used, permission for a self-administered method of data collection; a relatively small population meant that persuasion and reminder tactics had to be employed to ensure a high response rate, very economical in terms of monetary cost and time, as well as ensuring anonymity in the responses offered by respondents.

The questionnaire was made up of three (3) sections, to help measure the study variables: transformational and transactional leadership styles, safety citizenship behaviour, and professional commitment. However, preceding the three main sections, were questions to collate demographic data of respondents. It included data relating to the age, gender, educational level,

length of service, terms of employment, and job title of the respondents. Below are details of the scales/instrument used to measure the variables for the study?

### **3.8.1 Leadership Styles**

The study adopted the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (2004). The MLQ instrument is a widely accepted scale for measuring transformational, transactional and laissez-faire style of leadership. However, it contains 31 items for measuring the transformational and transactional leadership styles of the respondents. Nineteen (19) of these items measures the transformational style of leadership; which is made up of four (4) dimensions: idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. Items are measured on a 5-point Likert scale ranging from 1= “not at all”, 2 = “once in a while”, 3= “sometimes”, 4= “fairly often”, and 5= “frequently if not always”. Representative items include: my leader expresses confidence that goals will be achieved, and my leader acts in a way that builds my respect. A study by Wells and Welty Peachey (2011), recorded an average internal consistency reliability (Cronbach’s alpha) of 0.88 whereas the current study recorded a Cronbach’s alpha of 0.927. Additionally, the transactional style of leadership was also measured using 12 items listed in the MLQ. Transactional leadership is made up of three (3) dimensions: contingent reward, management-by-exception-active, and management-by-exception-passive. Items were measured on a 5 point Likert scale ranging from 1= “Not at all” to 5 “Frequently if not always”. Representative items used in the instrument include: my manager fails to interfere until problems becomes serious, and my manager waits for things to go wrong before taking action. In the same work by Wells and Welty Peachey (2011), a Cronbach’s alpha of 0.71 was recorded for transactional leadership whereas the current study conducted recorded a Cronbach’s alpha of 0.753.

### **3.8.2 Safety citizenship behaviour**

Safety citizenship behaviour was measured using the (SCB) scale developed by Hofmann et al. (2003). It contains 27 items which were developed by modifying several organizational citizenship behaviour (OCB) scales. These 27 items measure a broad group of safety behaviours under 6 dimensions. Namely, 1= helping: I assist others to ensure they perform their work safely, 2= voice: I express my opinions on safety matters even if others disagree, 3= stewardship: I go out of my way to look out for the safety of other gang members, 4= whistleblowing: I explain to other gang members that I will report safety violations, 5= civic virtue: I attend non mandated safety oriented meetings, 6= initiating safety related change: I try to change the way the job is done to make it safer. These were measured on a 5 point Likert scale ranging from 1= “definitely above and beyond what is expected for my job”, 2= “not expected part of my job”, 3= “somewhat above and beyond what is expected of my job”, 4 = “part of my job”, and 5= “expected part of my job”. Hofmann et al. (2003) reported a Cronbach alpha of 0.98 however the current study recorded a value of 0.961.

### **3.8.3 Professional commitment**

Professional commitment (PC) was measured using Bagraim (2003) adaptation of Meyer et al. (1993) occupational commitment scale, made up of 18 items that cut across three PC dimensions. Namely, affective, continuance, and normative professional commitment. Items include 1= affective: being in this profession is important to my self-image. 2= continuance: “I have put too much into this profession to consider changing now”. 3= normative: even if it were to my advantage I do not think that it would be right to leave this profession now. Using a 5 point Likert scale ranging from 1= strongly disagree to 5= strongly agree Bagraim (2003) reported a Cronbach alpha of 0.79, 0.85 and 0.82 for affective continuance and normative professional commitment respectively. The current study on the other hand, recorded 0.703 for

affective, 0.827 for continuance and 0.790 for normative. PC as a unitary construct recorded an alpha value of 0.868.

### 3.9 Reliability Analysis for Pilot Study

The process of administering questionnaires to the various respondents, was preceded by a piloting exercise. Although all questionnaires were adopted versions, there was the need to conduct a pre-test to ensure that, they were context and culture specific for this study. A pilot study is conducted with the aim of proving the validity and effectiveness of the research instrument used in soliciting relevant data needed to meet the objectives of the study (Gall, Borg, & Gall, 1996). The piloting process further helps to reveal and correct the weakness in the survey instrument, if there is any (Kothari, 2004). In view of this, a pilot study was conducted using fifteen (15) employees from the projects office of the electricity company of Ghana. The 15 employees who took part in the pilot study were however excluded from the main study. According to Pallant (2001), alpha values less than 0.7 are considered poor. Judging from table 3.1, the alpha values derived from the pilot study met the reliability requirements since all the variables tested had alpha values above 0.7.

**Table 3.1: Reliability Tests**

| Variable                | Alpha Value | Number of Items | Valid Cases |
|-------------------------|-------------|-----------------|-------------|
| Transformational        | 0.9463      | 19              | 15          |
| Transactional           | 0.8974      | 12              | 15          |
| Professional Commitment | 0.9425      | 18              | 15          |
| Affective               | 0.9799      | 6               | 15          |
| Continuance             | 0.7992      | 6               | 15          |
| Normative               | 0.9221      | 6               | 15          |
| SCB                     | 0.9617      | 27              | 15          |

**Source: Field data, 2016**

### 3.10 Data analysis

In accordance with Emory and Cooper (1991) assertion that, raw data is meaningless and has little significance till it has been transformed into useful information, questionnaires retrieved from respondents were coded, assigned numerical values and then analysed, using the statistical package for the social sciences (SPSS) software version 20. Relevant tests within this package were used to test the study hypotheses.

Descriptive and inferential methods of representing and analysing data were employed. The descriptive analysis approach was used to analyse the demographic data of the respondents. This method helps to represent data in the form of summary statistics such as frequencies, mean, median, and standard deviation of the various responses to items on the measuring scales (Pallant, 2011). The standard multiple regression was also used, to analyse hypothesis one. This hypothesis sought to examine the effect of two independent variables (transformational, and transactional leadership styles) on one dependent variable (i.e. safety citizenship behaviour). According to Tabachnick, Fidell, and Osterlind (2001), this method of analysis is appropriate when the researcher seeks to examine the influence of several independent variables on a dependent variable. It is also applicable when the sample size is greater than eighty (80). Additionally, hypothesis two was analysed using a simple linear regression, and a standard multiple regression. The researcher sought to establish a linear relationship between PC as a unitary construct and SCB, and then each of the predictor variables (APC, NPC, and CPC) and the dependent variable. (Independent PC variable) and the dependent variable (SCB). For hypothesis three, multiple hierarchical regression was used to test the moderating effect of professional commitment on the leadership- safety citizenship behaviour relationship.

### 3.11 Interpretation of data

Prior to under taking these analysis, normality of the data was examined with respect to skewness and kurtosis of the variables. This was to establish whether to use parametric or non-parametric tests for the study. Kline (2005) advanced that absolute values of Kurtosis above 10 and skewness greater than 3 indicate a problem. Additionally, Tabachnick et al. (2001) have posited that normality of data is attained when and kurtosis and skewness are between -2 and +2. The data set collected for this study proved normal with all its values for kurtosis and skewness falling between the various ranges. From table 3.2 below, all the variables fall within the ranges for skewness and kurtosis. Hence, all the variables used were normally distributed in terms of skewness and kurtosis for appropriate conclusions of findings.

**Table 3.2: Test for Normality**

|                         | N         |           | Skewness  |           | Kurtosis  |           |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                         | Statistic | Statistic | Std Error | Statistic | Std Error | Statistic |
| Transformational        | 197       | -0.412    | 0.173     | -0.106    | 0.345     |           |
| Transactional           | 197       | 0.234     | 0.173     | 1.61      | 0.345     |           |
| Professional Commitment | 197       | 0.133     | 0.173     | -0.365    | 0.345     |           |
| SCB                     | 197       | -0.529    | 0.173     | -456      | 0.345     |           |

**Source: Field data, 2015**

### 3.12 Ethical considerations

In conducting research, there are rules that clearly spell out what is acceptable and what is not. These rules or norms are referred to as ethics (Resnik, 2011). Research ethics covers issues relating to consent, deception, debriefing, confidentiality, participant right of withdrawal from

the investigation, protection of participants, among others. These were strictly adhered to in the course of the present study.

The process of data collection commenced with approval requirements in the form of seeking the consent of the organization selected for the research. An introductory letter was obtained from the Head of Department of the Organisation and Human Resource Management Department (OHRM) of University of Ghana Business School (UGBS), which was then submitted at the head office of the Electricity Company of Ghana. Upon continuous follow ups, permission was granted by the company and an HR officer was assigned to assist and facilitate the researcher in conducting the research. The questionnaires were however self-administered by the researcher.

Additionally, an important ethic in research as advanced by the Nuremberg Code (1949) states that “all research participation must be voluntary”. In view of this, respondents were given the mandate to voluntarily participate in the study. Thus freely given informed consent was sought. However, they were also made to understand that, despite their freely given consent, they had the right to withdraw at any point in time if they so desired. Gregory (2003) further posited that issues in connection with respondents’ anonymity, roles and incidents in the research work should be protected. In view of this, they were additionally made to understand that, their responses would be handled with utmost confidentiality and privacy. Respondents were also assured that, the research was strictly for academic purposes. The use of deception was avoided as the nature of the research as well as aims, and objectives were explained. Respondents were further taken through the extent to which their anonymity and confidentiality would be obtained. In this regard they were assured that respondent’s name, telephone number, social security number and any other personal details would be excluded from the research instrument. This enforced Babbie and Mouton (2001) affirmation that, to ensure confidentiality in the use of questionnaires, details such as names and addresses must be excluded on the questionnaire.

Boxes were also placed in the various district offices, where respondents were requested to drop their completed questionnaire (Mertens & Ginsberg, 2009).

### **3.13 Profile of Electricity Company of Ghana**

The Electricity Company of Ghana is a national corporate body which was established in 1947. Like several companies in Ghana, it has evolved. It was previously known as electricity department, then became Electricity Division, it was again changed to Electricity Corporation of Ghana and currently is known as Electricity Company of Ghana. It has been legally mandated by the government of Ghana to distribute safe and reliable electricity to industrial and domestic consumers within southern Ghana on a sound commercial basis

The company's vision is to be counted among the leading electricity distribution companies in Africa. And its mission is to provide quality reliable and safe electricity services to support the economic growth and development of Ghana.

The ECG has 12 directorates namely engineering, operations, finance, legal, audit, human resource, customer service, procurement, materials and transport, estate and premises, network projects, and ICT. It is however broken down to ten operational regions namely Accra East, Accra West, Tema, Eastern, Central, Volta, Western, Ashanti East, Ashanti West, and Sub Transmission.

The Factories, Offices and Shops Act 1970 (Act 328), charges employers with specific responsibilities to ensure a safe and healthy working environment. In ECG there is safety health and environment unit which is managed by the operations division. ECG's Safety, health and environment Policy document is set on the factory offices and shops (Act 328) and spells out the company's general policy on Safety,

ECGs Policy statement on safety, health and environment entreats the company to pursue a policy that shall eliminate accidents as far as is reasonably practicable by;

- i. Developing a safety, health and environment -conscious workforce;
- ii. Providing safe and healthy working environments;
- iii. Ensuring safe working methods; and
- iv. Providing safety machinery/equipment and working gears.

The policy document also indicates that “both employees and employer shall respect the rights of each other in the discharge of their respective obligation as specified in the policy documents”. It also spells out steps and procedures employees ought to follow in emergency situations, compliance, and reporting issues relating to safety. The ECG safety, health and environment policy establishes Safety, Health and Environment Committees headed by an officer with the rank of Head office Director at the top level. Similarly ECG has middle level management staff in charge of safety and health at the regional level and safety committees and representatives at the districts level.



## **CHAPTER FOUR**

### **PRESENTATION OF RESULTS**

#### **4.1 Introduction**

This study sought to investigate the predictive nature of leadership styles (transformational and transactional) on the safety citizenship behaviour of employees within a power distribution company in Ghana. The study further examined the moderating role of professional commitment on this relationship. In a bid to meet the research objectives and answer the research questions posed, hypotheses were stated and tested. Having collected data using non probability sampling techniques and having processed and analysed the data using SPSS version 20, results are shown below.

#### **4.2 Demographic characteristics of the respondents**

This section of the chapter exhibits a tabular representation of the frequency distribution of the sex, age, level of education, tenure (number of years worked in the organization), terms of employment, and job title of the respondents. From table 4.1 below, the statistics in relation to the sex distribution of the respondents of the study revealed that out of 197 respondents, 177 were males (representing 89.85%) while 20 (representing 10.15%) were female. As depicted, males clearly formed the majority in this study. This is an indication that professions within the power distribution industry are male dominated, and this can be attributed to the intensity and nature of work demand that characterizes the power distribution industry. With respect to age, 3 respondents (representing 1.52%) were below 21 years; 55 respondents (representing 27.92%) were between the ages of 21-30 years; 81 respondents (representing 41.12%) were within the age range of 31-40 years; 46 of the respondents (representing 23.35%) were between the ages of 41-50 years; whereas the remaining 6.09% made up of 12 respondents were within the range of 51-60 years. This summary revealed that cumulatively, about 60% of the respondents were

between the ages of 21-40 years. Suggesting that most of the workers within power distribution are still within the early stages of their career

**Table 4.1: Summary of Demographic Characteristics of Respondents**

| Details                    | Frequency | Percentage |
|----------------------------|-----------|------------|
| <b>Gender</b>              |           |            |
| Male                       | 177       | 89.85      |
| Female                     | 20        | 10.15      |
| <b>Age (y)</b>             |           |            |
| Below 21                   | 3         | 1.52       |
| 21-30                      | 55        | 27.92      |
| 31- 40                     | 81        | 41.12      |
| 41- 50                     | 46        | 23.35      |
| 51- 60                     | 12        | 6.09       |
| <b>Level of education</b>  |           |            |
| WASSCE                     | 27        | 13.71      |
| Higher National Diploma    | 55        | 27.92      |
| Bachelor's degree          | 92        | 46.7       |
| Master's degree            | 23        | 11.68      |
| <b>Work Tenure</b>         |           |            |
| Below 1 year               | 17        | 8.63       |
| 1-5 years                  | 54        | 27.41      |
| 6-10 years                 | 56        | 28.43      |
| 11-15 years                | 50        | 25.38      |
| More than 15 years         | 20        | 10.15      |
| <b>Terms of Employment</b> |           |            |
| Casual worker              | 12        | 6.09       |
| Contract worker            | 14        | 7.11       |
| Permanent worker           | 171       | 86.8       |
| <b>Job Title</b>           |           |            |
| Engineer                   | 64        | 32.49      |
| Technical Staff            | 74        | 38.07      |
| Artisan                    | 58        | 29.44      |

**Source: field data, 2016**

This is an indication of the youthful passion, and zeal respondents would exhibit towards work. Also 27.92% falling between the ages of 21- 30 suggests that the company hires young graduates. This is commendable as it plays a tremendous role in reducing unemployment rates in the country. It could also be inferred that, majority of the respondents were first degree holders (46.7%), whereas 27.92% of the respondents were HND holders. On the other hand, 13.71% were WASSSCE graduates, while, 11.68% were 2<sup>nd</sup> Degree holders. Majority of the

respondents having a first degree is not surprising. It is to be noted that majority of the respondents are between the ages of 31 – 40 years and relatively youthful. Recently, there has been a tremendous increase in the number of public and private universities across the country. This, coupled with high unemployment rates has meant that most entry requirements for jobs have been pecked at first degree. It is therefore not surprising that, this is reflected in the statistics. Statistics in relation to work tenure revealed that 8.63 % of employees sampled, had worked with the organization for less than a year; with 27.41% falling between 1- 5 years, 28.43% having between 6-10 years working experience, while 25.38% had between 11-15 years working experience. Employees with more than 15 years working experience formed only 10.15% of the study population. This reveals that relatively, more respondents have good working experience. The implications however are twofold. It is likely that, they are bound to demonstrate high levels of professionalism due to years of experience on the job. On the flip side however, they may exhibit low professionalism due to complacency and conversance with work routine. Statistics further revealed that 12 respondents representing 6.09% were casual workers, while 14 respondents, representing 7.11% were contract staff. The majority, 171 (86.8%) however, were permanent staff. These statistics portray that, a vast majority of the workers in ECG, directly connected to the distribution of power, have some level of job security. It also demonstrates the commitment of the organization towards staff retention.

### 4.3 Descriptive Statistics

**Table 4.2 Descriptive statistics of each variable**

| Variable                | Obs | Mean | Min  | Max  | SD    |
|-------------------------|-----|------|------|------|-------|
| Transformational        | 197 | 3.29 | 1.05 | 5    | 0.763 |
| Transactional           | 197 | 2.74 | 1    | 5    | 0.609 |
| Professional commitment | 197 | 3.62 | 2    | 4.78 | 0.580 |
| SCB                     | 197 | 3.63 | 1.3  | 5    | 0.836 |

**Source: Field data, 2016**

Table 4.2 above, shows the descriptive distribution of each of the variables used in the present study. From the table, transformational leadership had a mean of 3.29 with an SD = .763 while the transactional style of leadership recorded a mean of 2.74 with an SD = .609. The moderating variable, professional commitment on the other hand, recorded a mean of 3.62 and an SD = .580. While SCB recorded a mean of 3.63 and an SD = .836. Generally, the mean values recorded, showed that the respondents were moderate in their responses to questions related to the assessment of leadership styles as well as their level of professional commitment. Moreover, the standard deviation values revealed that transformational leadership, transactional leadership, and safety citizenship behaviour had response variations above 60%. Whereas, professional commitment had about 58% response variation.

#### 4.4 Reliability Analysis

**Table 4.3 Reliability statistics for each variable**

| Variable         | Alpha value | Number of items |
|------------------|-------------|-----------------|
| Transformational | 0.9272      | 19              |
| Transactional    | 0.7536      | 12              |
| Affective        | 0.7026      | 6               |
| Continuance      | 0.8266      | 6               |
| Normative        | 0.7907      | 6               |
| PC(unitary)      | 0.8685      | 18              |
| SCB              | 0.9617      | 27              |

**Source: Field data 2016**

From Table 4.3 above it is clear all variables had Cronbach alphas above .70. Sekaran and Bougie (2003), advanced that, reliabilities within the range of .70 are acceptable. Whereas, those above .80 are considered good. On the other hand, those that fall below .60 are considered poor. From the table, transformational leadership style recorded an alpha value of .9272, while

transactional leadership recorded a value of .7536. Professional commitment recorded .8685 while SCB recorded .9617. In accordance with Sekaran and Bougie (2003) assertion, the researcher can rightly say that no scale adopted for the study was poor. The scale measuring transactional leadership is considered acceptable, while scales measuring transformational leadership, professional commitment and safety citizenship behaviour are considered good.

#### **4.5 Testing Research Hypotheses**

Three main hypotheses were proposed and tested for in this study, by the use of statistical tests such as simple linear regression, standard multiple regression, and hierarchical multiple regression.

##### **4.5.1 Checking the Assumptions**

Hair, Black, Babin, and Anderson (2010) postulate that, the assumptions of multicollinearity, linearity, homoscedasticity, and independence of residuals must be satisfied before running a standard multiple regression

##### **4.5.2 Assumption of multicollinearity**

Pallant (2011) opines that multicollinearity assumptions seek to investigate whether or not the independent variables are closely related. When the independent variables (IV) are found to be highly correlated, there is what is termed as multicollinearity. This assessment is necessary because high correlation among two or more IVs, makes it difficult to determine their unique predictive capabilities on the dependent variable. In assessing multicollinearity, the discriminant validity technique by Campbell and Fiske (1959) was adopted. Using Fornell and Larcker (1981) criterion of .85, it is evident that discriminant validity exists between the scales adopted for the study.

**Table 4.4: Discriminant validity**

|                             | PC           | SCB          | Transactional Leadership | Transformational Leadership |
|-----------------------------|--------------|--------------|--------------------------|-----------------------------|
| PC                          | <b>0.647</b> |              |                          |                             |
| SCB                         | -0.323       | <b>0.721</b> |                          |                             |
| Transactional Leadership    | 0.067        | 0.275        | <b>0.805</b>             |                             |
| Transformational Leadership | 0.181        | -0.262       | -0.343                   | <b>0.726</b>                |

**Source: Field data, 2016,** Fornell-Larcker Criterion

#### 4.5.3 Assumption of linearity

This assumption of linearity assumes a straight relationship between the independent and dependent variables (Pallant, 2011). This can be examined from a bivariate scatter plot which reveals that a unit change in an independent variable causes a responding unit change in the dependent variable. The assumption of linearity was satisfied in this study as presented in the (Appendix B).

#### 4.5.4 Assumption of homoscedasticity

With respect to the assumption of homoscedasticity, Hair et al. (2010) advanced that, for a data to be qualified for running a regression analysis, the variance of the error terms should appear constant over a range of values of the independent variables. This can also be checked with the bivariate scatterplot which shows an oval shaped rather than a cone or funnel shape (Field, 2009). This assumption for regression analysis was also met since the diagrams revealed an oval shape. (Appendix B).

#### 4.5.5 Independence of Residuals

According to Hair, Black, Babin, Anderson, and Tatham (2006), the independence of residuals means the various predictions are independent of each other. see also Tabachnick and Fidell (2007). A bivariate scatter plot which shows that the points are mostly concentrated in a rectangular pattern satisfies the assumption of the independence of residuals. The scatter plots of this study satisfied this assumption since most of the points were concentrated in a rectangular

pattern (Appendix B). Having satisfied these assumptions, the various hypotheses were analysed in relation to the various research objectives and the results are presented as follows:

#### 4.5.6 Hypothesis one

Hypothesis one investigated the predictive relationship that exist between leadership styles (transformational, and transactional) and the SCB of employees in ECG. The hypotheses were stated as

*H1a Transformational leadership style will have a significant positive relationship with SCB*

*H1b Transactional leadership style will have a positive relationship with SCB*

Standard multiple regression was used to test the hypothesis and summary of the results are presented in Table 4.9 below.

**Table 4.5: Summary of Standard Multiple Regression for the LS and SCB**

| Model<br>K       | Unstandardized<br>Coefficients |              | Standardized<br>Coefficients | T       | Sig      |
|------------------|--------------------------------|--------------|------------------------------|---------|----------|
| Y                | B                              | Std<br>Error | Beta                         |         |          |
| 1 (Constant)     | 99.077                         | 9.229        |                              | 10.735  | 0.000    |
| Transformational | 0.364                          | 0.107        | 0.233                        | 3.973   | 0.001*** |
| Transactional    | -0.727                         | 0.212        | -0.235                       | -0.3425 | 0.001*** |

a. Dependent Variable: SCB

b. F value= 10.428,  $R^2 = .097$ , \*\*\* $p < .01$ ,  
\*\* $p < .05$       **Source: Field data, 2016**

Analysis above showed an F value (2,197) = 10.428 which is a statistical indication for joint significance. This implies that transformational and transactional leadership jointly, and significantly determine the level of employee Safety Citizenship behaviour in ECG. Additionally, Table 4.10 generally shows that transformational leadership ( $\beta = .233$ ,  $p < 0.01$ ) significantly and positively predicted an employee's tendency to exhibit SCB. Thus, holding

other predictors constant, a unit increase in transformational leadership leads to a 23% increase in the safety citizenship behaviour of employees. On the other hand transactional leadership ( $\beta = -0.235, p < 0.01$ ) although significant, negatively predicted an employee's tendency to exhibit SCB in an organization. Thus, all other things being equal, when there is a transactional leader, Safety Citizenship Behaviour decreases by 24%. The analysis however indicated that the two leadership styles (transformational and transactional) accounted for approximately 9.7% of the variance in the SCB of employees, while 89.3% represented the unexplained variation. The results therefore supported hypothesis 1a that, there would be a significant positive relationship between transformational leadership and SCB. Hypothesis 1b on the other hand was not supported. A positive relationship was expected between transactional leadership and SCB however a significant negative relationship was observed. This concludes that employees are likely to engage in SCB when they have a transformational leader. However if they are directly supervised by a transactional leader they are likely not to engage in SCB as determined by the signs of the standardized coefficient.

#### **4.5.7 Hypothesis Two**

The hypothesis sought to examine the relationship that exist between professional commitment and SCB. The hypotheses were stated as

*H2a: professional commitment will have a significant positive relationship with SCB*

*H2b: APC will have a significant positive relationship with SCB*

*H2c: NPC will have a positive relationship with SCB*

*H2d: CPC will have an insignificant relationship with SCB*

**Table 4.6 Results of Simple Linear Regression for PC and SCB**

| Model                   | Unstandardized Coefficients | Std Error | Standardized Coefficients | T     | Sig      |
|-------------------------|-----------------------------|-----------|---------------------------|-------|----------|
| 1 (Constant)            | 48.179                      | 9.575     |                           | 5.032 | 0.000    |
| Professional Commitment | 0.762                       | 0.145     | 0.352                     | 5.257 | 0.000*** |

a. Dependent Variable: Safety Citizenship behaviour

b. F value= 27.634,  $R^2 = .124$ , \*\*\* $p < .01$ , \*\* $p < .05$  **Source: Field data, 2016**

The simple linear regression results for the relationship between professional commitment (PC) and safety citizenship behaviour SCB was shown to be significant ( $\beta = .352$ ,  $p < 0.01$ ) the fitness of the model was confirmed at F value =  $(1,197) = 27.634$ . Table 4.6 generally shows that, a unit increase in the professional commitment of an employee leads to a 35% increase in safety citizenship behaviour. The analysis however indicated that professional commitment accounted for approximately 12.4% of the variance in the SCB of employees while 87.6% represent the unexplained variation. The results therefore fully supported the speculations of the study (i.e. professional commitment will be positively related to SCB). The results show that employees are likely to engage in SCB when they are professionally committed as determined by the signs of the standardized coefficient.

In congruence with (Meyer et al., 1993) assertion the researcher went a step further to test the 3 dimensions of professional commitment and their respective relationships with SCB, by using a standard multiple regression analysis.

**Table 4.7 Coefficients**

| Model        | Unstandardized Coefficients |           | Standardized Coefficients | T     | Sig     |
|--------------|-----------------------------|-----------|---------------------------|-------|---------|
|              | B                           | Std Error | Beta                      |       |         |
| 1 (Constant) | 48.756                      | 10.556    |                           | 4.619 | 0.000   |
| Affective    | 0.768                       | 0.427     | 0.135                     | 1.798 | 0.074*  |
| Continuance  | 0.503                       | 0.417     | 0.097                     | 1.206 | 0.229   |
| Normative    | 0.969                       | 0.386     | 0.211                     | 0.013 | 0.013** |

a. Dependent Variable: Safety Citizenship Behaviour

b. F value= 9.296, R2= .126, \*\*\*p<.01, \*\*p<.05, \*p<.1

Source: Field data, 2016

The analysis above showed an F value (3,197) = 9.296 which is a statistical indication for joint significance, demonstrated that affective, continuance, and normative professional commitment jointly and significantly determine the level of SCB in ECG. Moreover, Table 4.7 generally shows affective professional commitment ( $\beta = .135$ ,  $p < 0.1$ ) significantly and positively predicted an employee's tendency to exhibit SCB. Thus, holding other predictors constant, a unit increase in employee affective professional commitment leads to a 14% increase in SCB. On the other hand continuance ( $\beta = .097$ ) although not significant, positively predicted an employee's tendency to exhibit SCB. Normative professional commitment ( $\beta = .211$ ,  $p < 0.05$ ) also significantly and positively predicted an employee's tendency to exhibit SCB in an organization. Thus, all things being equal, when a professional is affectively committed, SCB increases by 14%. On the other hand when a professional has continuance commitment, SCB increases by 9% and when a professional is normatively committed, SCB increases by 21%. (Affective, continuance and normative professional commitment) accounted for approximately 12.6% of the variance in the SCB of employees while 87.4% represent the unexplained variation. The results therefore partly supported speculations of the study (i.e. affective and normative professionally committed employees engage in SCB). The results show that employees are likely to engage in

SCB when they are affectively and normatively professionally committed as indicated by the signs of the standardized coefficient.

#### 4.5.8 Hypothesis Three

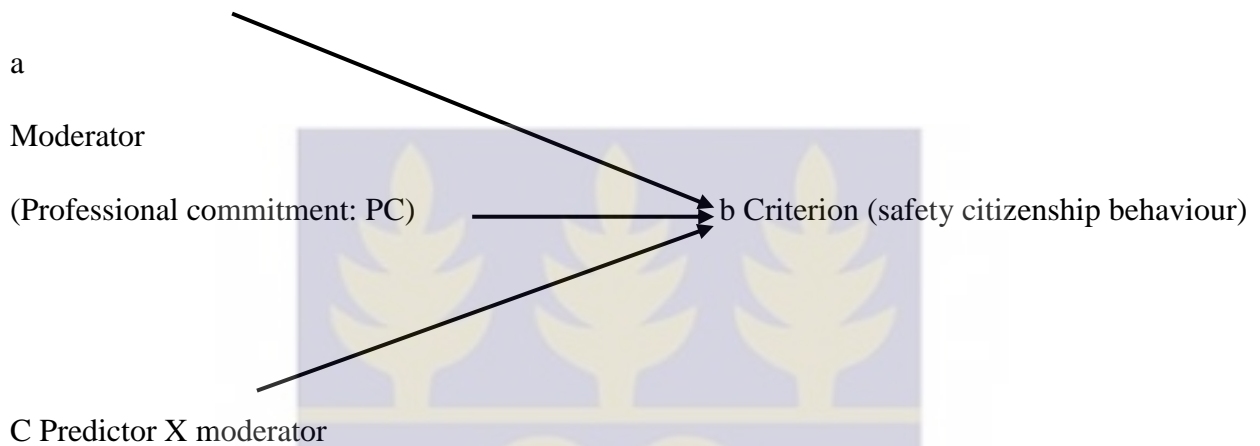
Hypothesis three sought to examine the moderating effect of professional commitment on the relationship between leadership styles (transformational, and transactional) and safety citizenship behaviour. The four procedures proposed by Baron and Kenny (1986) for testing moderation effect was employed.

1. Centre (standardize) the predictor & the moderator. Centring is a linear transformation method which eliminates challenges in line with multi-collinearity. This is achieved by subtracting the mean value for a variable from each score for that variable (Aiken, West, & Reno, 1991)
2. Calculate the interaction term (i.e. predictor X moderator) using the standardized values.
3. Regress the outcome variable on the predictor, moderator, and their interaction. That implies that, in the hierarchical regression analysis, the predictor should be entered in the first block, the moderator(s) in the second block and the interaction terms in the third block.
4. If the interaction effect is significant (i.e. if  $\beta$  of predictor X moderator is significant), then there is a moderation effect. On the other hand if the interaction term is not significant, moderation effect does not hold.

According to Baron and Kenny (1986), it is possible to establish moderation from correlational and experimental perspectives by using a causal path analysis. For this study, three causal paths as illustrated on figure 4.1 (a, b, and c) were used. This involved the dependent variable (DV), safety citizenship behaviour: the effect of the independent variable (IV) leadership styles, on the

DV (safety citizenship behaviour) path a, the effect of the moderation variable (professional commitment) on the DV (safety citizenship behaviour) path b, and then the interaction or product of these two paths (a, and b) on the DV (path c) (refer to figure 4.1)

Predictor (leadership styles: TF, TS)



TF, TS\*

Figure 4.1 path diagram of moderation model (Baron & Kenny, 1986)

The interaction term, the (IV), and moderating variables were first centred to reduce the effect of multicollinearity (Aiken et al., 1991). To achieve this, the mean value of the variable was subtracted from the individual scores of the variable. Baron and Kenny (1986) posited that a moderation hypothesis is supported if the interaction term (path c) is significant.

*H3a Employee professional commitment will moderate the transformational leadership style and SCB relationship*

*H3b Employee professional commitment will moderate the transactional leadership style and SCB relationship*

**Table 4.8 Summary of hierarchical multiple regression testing the moderation effect of professional commitment on the relationship between Transformational leadership and Safety citizenship behaviour**

| Step |             | B      | Std. Error | Beta    |
|------|-------------|--------|------------|---------|
| 1    | (Constant)  | 97.883 | 1.579      |         |
|      | TF centered | .321   | .109       | .206*** |
| 2    | (Constant)  | 97.883 | 1.544      |         |
|      | TF centered | .276   | .108       | .177    |
|      | PC centered | .513   | .163       | .218    |
| 3    | (Constant)  | 97.412 | 1.535      |         |
|      | TF          | .265   | .106       | .170    |
|      | PC          | .560   | .162       | .238    |
|      | TFXPC       | .026   | .010       | .171**  |

Note. R<sup>2</sup> = .042, .089 and .118 for steps 1, 2, and 3 respectively,  $\Delta R^2$  = .042, .047 and .029 for steps 1, 2, and 3 respectively. \*\*\*p<.01 \*\*p<.05

Table 4.8 above shows that transformational leadership (TF) had a significant positive relationship with employee SCB ( $\beta = .206$ ,  $p = .004$ ). It was further hypothesized that professional commitment will moderate the relationship between TF and SCB. This prediction is accordingly supported by the data ( $\beta = .171$ ,  $p = .013$ ). The interaction effect between TF and SCB was statistically significant and accounted for 2.9% variance in the criterion variable as shown by  $\Delta R^2$

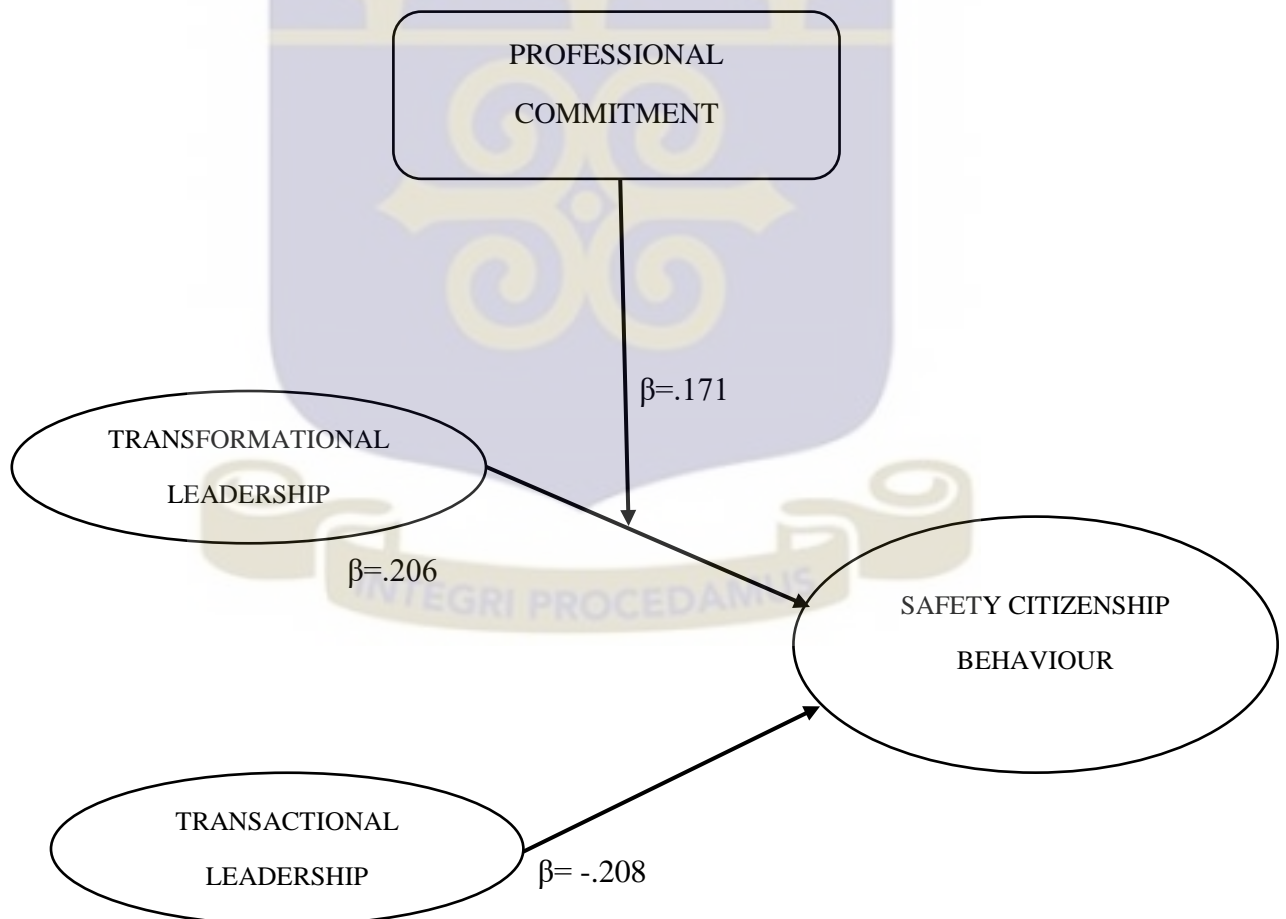
Table 4.9 below shows that transactional leadership (TS) had a significant negative relationship with SCB ( $\beta = -.208$ ,  $p = 0.003$ ). Following this, it was hypothesized that, PC would moderate the relationship between TS and SCB. This prediction however did not hold as shown by the data ( $\beta = -.057$ ,  $p = .907$ ). The interaction effect between TF and SCB was statistically insignificant hence did not account for any variance as shown by the  $\Delta R^2$  (.000).

**Table 4.9 Summary of the hierarchical multiple regression analysis testing the moderating effect of professional commitment on the relationship between transactional leadership and safety citizenship behaviour**

| Steps |             | B       | Std. Error | Beta     |
|-------|-------------|---------|------------|----------|
| 1     | (Constant)  | 97.883  | 1.578      |          |
|       | TS centered | -.643   | .216       | -.208*** |
| 2     | Constant    | 97.883  | 1.537      |          |
|       | TS centered | -.613   | .211       | -.198    |
|       | PC centered | .548    | .161       | .233     |
| 3     | (Constant)  | 102.442 | 39.019     |          |
|       | TS centered | -.465   | 1.284      | -.150    |
|       | PC centered | .623    | .665       | .265     |
|       | TSPC        | -.002   | .020       | -.057    |

a. Note. R<sup>2</sup> = .043, .097 and .097 for steps 1, 2, and 3 respectively,  $\Delta R^2$  = .043, .054 and .000 for steps 1, 2, and 3 respectively. \*\*\*p<.01, \*\*p<.05

**Fig 4.2 Conceptual framework after analysis**



## **CHAPTER FIVE**

### **DISCUSSION OF FINDINGS**

#### **5.1 Introduction**

This chapter elaborates on the results of the various analysis conducted in the previous chapter, and further discusses its significance in relation to the study objectives, existing literature as well as the geographical context of the study.

#### **5.2 Socio demographic analysis of the data**

The Ghana Statistical Service report on the 2010 population and housing census, reports that out of a total population of about 24 million, there are more females than males. Females totaled, 12,633,978 representing 51.2% while males totaled 12,240,845, which also represented 48.8% of the total population.

Inferring from the above statistics, the disparity in percentage difference between males and females could be attributed to a number of factors. Although currently there are more females than males, this is not reflected in the various educational institutions. Averagely there are more boys than there are girls in school. More so, the disparity in figures tend to widen as children climb the educational ladder. Again, societal classification of professional stereotypes especially within the African context discourages women from engaging in professions that are classified for men. It has also been empirically proven that men are bound to perform better in assignments relating to spatial task, whereas women are more inclined to perform better in verbally related tasks (Bell, Willson, Wilman, Dave, & Silverstone, 2006; Persson et al., 2013). It is therefore not surprising that a recent survey in the United Kingdom revealed that, young females drop academic subjects or barely struggle to pass subjects needed to study engineering, such as math

and physics. This invariably had resulted in the remarkably low rate of females working in the industry, with only 8% of British engineers being females (Rankin, 2014).

From the data gathered, majority of the respondents were aged between 31- 40 years. It could therefore be argued that indeed, such an industry which requires intensive work would be dominated by the youth, who are full of passion, energy, and exuberance. Another interesting finding on the length of service of the respondents indicated that, about 8.6% are relatively new as compared to about 28% who have spent between 6-10 years in the profession. It can be argued that, by virtue of the number of years spent in this line of work, they may have embedded professional ethics, traditions and customs such as safety, so much so that they tend to unknowingly engage in safety conscious behaviours. On the flip side, it is also likely that they may have become too conversant with professional ethics, such as safety routine, and as such tend to take these activities for granted. It is additionally expected that since they have worked in the organization for a while they should have built some form of network with other colleagues to warrant them looking out for each other, by engaging in some safety related citizenship behaviours.

Again, it was not surprising to discover from the data gathered that, majority of respondents were bachelor degree holders. With increases in the number of accredited public and private universities across the country, as well as flexibility in lecture time schedules; regular, weekend, evening, and sandwich modules, it has become much more convenient for employees to further their education and build upon their professions.

### **5.3 Findings on Research Objectives and Hypotheses Testing**

Research objective one sought to determine the extent to which leadership styles (transformational, and transactional) predicted employees' safety citizenship behaviour (SCB). In view of this objective, it was hypothesized that both transformational and transactional leadership styles will have a significant positive relationship with SCB.

#### **5.3.1 Transformational and Transactional Leaderships Relationship with SCB**

In comparing the results of the analysis with the formulated hypotheses (i.e. transformational leadership will have a positive relationship with SCB, Transactional leadership will have a positive relationship with SCB). The hypothesized relationship in line with transformational leadership, was supported by findings of the present study. However, contrary to the predicted relationship in line with transactional leadership and SCB, findings revealed a negative significant relationship. These finding indicate that, for employees to engage in SCB in ECG, front line leaders and supervisors employees directly report to, must be transformational leaders.

In relation with the positive significant effect of transformational leaders and employee SCB, findings are consistent with assertions made by Bass (1985) a renowned leadership scholar. His findings revealed that generally, followers have a strong identification with leaders who are transformational. As such, employees who work under transformational leaders are more inclined to exert extra effort in the discharge of their duties, and consequently perform above and beyond perceived expectations or job requirements. This is usually because, they feel motivated by the actions of their leaders to do so. This assertion has been supported by other renowned scholars (Avolio, Zhu, et al., 2004; Bass & Stogdill, 1990; Conger & Kanungo, 1998; Krishnan, 2005; Lee, Kim, & Kim, 2013; Yammarino & Bass, 1990; Yukl, 1989). This implies that for engineers and technicians in ECG to engage in safety citizenship behaviours, front line leaders and supervisors must adopt transformational leadership tendencies. Findings from this study are

also consistent with Kapp (2012), as well as Christian et al. (2009), who posited that all four dimensions of transformational leaders, are indeed relevant in enhancing safety related behaviour. It was therefore not surprising that, findings from both studies, conducted among participants from various racial groups, and Americans respectively, confirmed a positive significant relationship between transformational leadership and employee safety participation. Findings from this study, are also in line with an empirical study by Griffin and Hu (2013), who reported strong positive relationships between facets of transformational leadership, and safety participation among participants from various occupational groups in Australia. Similarly, Inness et al. (2010) reported strong positive relationships between transformational leadership and safety participation and went a step further to argue that, contrary to some scholarly assertions that, transformational leadership ought to be safety specific in order to significantly impact on the safety behaviours of employees, general transformational leadership was in fact adequate, effective, as well as sufficient to achieve a variety of organizational goals, including encouraging employees' to take extra measures to make work, the working environment, themselves and work colleagues safe. Moreover, Hofmann et al. (2003) reported that high leader member exchange relationships (LMX), more likely to be transformational than transactional was significantly related to SCB role definitions, which ultimately, encouraged employees to engage in SCB.

The current study however, contradicts some theoretical assertions and literature. For instance Thamrin (2012) assertion that, transactional leaders are ideal choices in meeting employee safety needs which encompasses physical safety was not confirmed in this study. As a negative significant relationship between transactional leadership and SCB was observed. Nonetheless, this finding is in line with findings by Griffin and Neal (2000), who reported consistent significant negative relationship between transactional leadership (management by exception passive(MBEP), and safety participation. These researchers however argued that, the passive

nature of this leadership style could have been a contributory factor to the negative relationship reported; in that, (MBEP) leaders fail to interfere in safety issues until problems become severe. Since most employees look up to their leaders, it is likely that such subordinates take up a relaxed and unconcerned attitude waiting for safety issues to become problematic before reacting. Although the present study did not test the individual facets of transactional leadership as separate constructs, it is very likely that a majority of employees who participated in this study, and responded to being directly supervised by transactional leaders, may have leaders who demonstrate management by exception passive (MBEP) leadership tendencies. Interestingly in that same study by Griffin and Neal (2000), a positive relationship was observed between management by exception active (MBEA), and safety participation. Clarke (2013) similarly reported a positive significant relationship between (MBEA) transactional leadership and safety participation. These findings are however a direct contradiction to an earlier study conducted by Clarke and Ward (2006). Findings from that study revealed that, transactional style of leadership had a rational persuasive effect on employees, in the sense that; leaders giving employees some form of autonomy or latitude in dealing with work related issues, connoted their respect trust and confidence in their subordinates' ability to understand organizational goals and managerial objectives. Consequently, by way of appreciating this demonstration of confidence, employees were more likely to proactively engage in safety behaviours. This finding was further supported by Barling and Hutchinson (2000),Tepper et al. (1998) and Zacharatos et al. (2005)

Clearly, with all the varied findings in research as well as the current study, it appears that the transformational leadership style has a higher propensity to promote SCB in organizations than the transactional leadership style. Hoffmeister et al. (2014) in testing the individual facets of both transformational and transactional leadership style on a variety of safety outcomes pointed to the fact that, transformational leadership consistently, positively predicted a variety of safety behaviours including safety participation; perhaps by virtue of the nature of that leadership style.

This leadership style places premium on values, trust, respect, as well as employee perception of the leader. These researchers argued that, employees tend to place more premium on these behaviours, than on rewarding behaviours characterised by the transactional leadership style. This assertion had been further supported by Gittleman et al. (2010).

### **5.3.2 Safety citizenship behaviour and professional commitment**

The second research objective was to examine the relationship between safety citizenship behaviour (SCB) and professional commitment (PC). However in line with Meyer et al. (1993) assertion, all three dimensions of PC had to be tested. In view of this the following were hypothesized.

*H2a:* professional commitment will have a significant positive relationship with SCB

*H2b:* APC will have a significant positive relationship with SCB

*H2c:* NPC will have a positive relationship with SCB

*H2d:* CPC will have a positive relationship with SCB

Analysis of the relationship between professional commitment and safety citizenship behaviour in Table 4.11 revealed that, in assessing professional commitment as a unitary construct, there was a strong positive significant relationship between PC and SCB. This is in consonance with findings by Duarte (2015) , Wang and Shen (2012), and Cohen and Kol (2004), who reported Consistent strong positive relationships between PC and citizenship behaviours. More so, these findings are in congruence with assertions made by Bass (1985), as well as Bogler and Somech (2004) that, by virtue of the importance professionally committed persons attach to their jobs and professions, they are likely to go the extra mile in discharging their duties.

Cohen and Kol (2004) in addition to the SCB, PC finding, reported findings in relation to levels of education and the variables under study. They further observed that the professional commitment citizenship behaviour relationship grew stronger with increases in the level of education among research participants. Similarly Wang and Shen (2012), and Jeffrey et al. (1996) reported same findings among participants from China and Taiwan respectively.

Following Meyer et al. (1993) assertion that, in assessing PC there was the need to assess all three dimensions as they were distinct components, the present study went a step further to test the relationship between SCB and the three PC dimensions. In assessing all three, the strongest SCB, PC relationship was found to be between normative professional commitment (NPC) and SCB, followed by affective professional commitment (APC) and SCB. Continuance professional commitment (CPC) on the other hand demonstrated an insignificant positive relationship with SCB. It appears that findings from this study in relation to the affective and normative PC and SCB relationship, are in congruence with findings from other studies, as both record positive significant relationships with citizenship behaviours. A rationale behind the consistency in findings, could be attributed to the fact that, most reviewed studies in relation to professional commitment, were conducted in the medical field, which is considered a high risk profession. The current study focused on an energy distribution industry which is similarly considered a high risk industry. The congruence in findings between positive significant affective, and normative SCB relationships observed, could also be attributed to Bogler and Somech (2004) assertion that, professionalism in itself was likely to elicit some altruistic behaviours, especially when the altruistic behaviour in question, in this case safety citizenship behaviours is embedded within the core values of the profession. It is therefore not surprising that, APC and NPC consistently recorded such findings as both industries have safety embedded within their core professional values. Professionals who are affectively committed, have a strong emotional attachment to their profession and remain members of their profession by deliberate choice.

Such individuals are bound to comply with professional ethics and even go to extra lengths to perform extra roles in line with specified or unspecified professional codes of conduct. It has also been argued that normative PC although initially weak, builds and cumulates into affective PC. Usually people who are normatively committed feel the need to remain in the professions by virtue of the sacrifices involved in attaining the professional status. It is therefore not surprising that such individuals engaged in SCB.

It was however expected that APC would demonstrate a stronger significant relationship with SCB than NPC. The present study however demonstrated the inverse. Statistics from the current study clearly demonstrated that, normatively committed professionals were more likely to engage in SCB than affectively committed professionals. This contradicts findings by Cohen (2006); Cohen and Kol (2004); Duarte (2015); Meyer et al. (1993). Nonetheless, this could be attributed to the cultural and geographical context of the present study. It is likely that participants sampled for the study demonstrated high levels of normative professional commitment than affective professional commitment. It is also likely that participants sampled for his study have made numerous sacrifices to attain their current professional status.

Findings from this study in relation to (CPC) are in congruence with findings from a study by Meyer et al. (1993), who similarly, reported an insignificant positive relationship. Leite (2007) on the other hand reported a positive significant relationship between continuance professional commitment and citizenship behaviours. Individuals with a high sense of continuance professional commitment retain professional status by virtue of the cost or gain implications associated with quitting, which could either be economical, personal, or emotional costs implications. Such individuals do not go beyond specified laid down mandatory work requirements. It is therefore not surprising that, an insignificant positive relationship with citizenship behaviours was observed. This finding could be attributed to the context of the study.

It has been argued that the Ghanaian educational system is quite inflexible; as it's often quite difficult to digress from one academic field to another. For example in Ghana, switching from the sciences to arts and vice versa is an arduous task. Global unemployment rates have also meant that people have found themselves in professions by virtue of financial gains or because they were the only jobs available. It is very likely that people have found themselves in jobs or professions by chance and not by choice. Such individuals are bound to demonstrate high continuance professional commitment. It is expected that they will only keep up with requirements necessary to retain membership in the jobs or profession. It is therefore not surprising they put up the "i don't care" attitude or put no effort whatsoever in being proactive. Nonetheless, although quite insignificant, the positive relationship observed, confirms Meyer et al. (1993) assertions that, even though employees or professionals who demonstrate continuance commitment, see no urgency in being proactive at work, they however play safe and try to stay on the border line by engaging in mandatory professional codes of ethics such as engaging in some safety related behaviours, however, do not go beyond such mandated requirements.

### **5.3.3 Leadership styles and safety citizenship behaviour, PC as a Moderator**

Having examined the leadership, safety citizenship relationship the researcher went a step further to introduce a moderator; professional commitment, to examine its effect on the leadership, SCB relationship. It was observed that the transformational leadership, SCB relationship was positively significant. After the introduction of the moderator, the relationship remained significant. A negative relationship was however recorded for transactional leadership. Introducing the moderator played no significant role in changing the direction of the relationship. This indicates that, when risk prone professionally committed employees within ECG are directly supervised by transactional leaders, their tendency to engage in safety related citizenship behaviours will be low.

Although extant literature reveals that a study of this nature is yet to be formally conducted, conceptualizations drawn from extant literature reveals that, the findings in line with transformational leadership, are in congruence with assertions and findings by Cohen (2006); Cohen and Kol (2004); Didla et al. (2009) ; and Hofmann and Morgeson (1999), on the role commitment to a profession could play in promoting, enhancing and improving safety citizenship behaviour. It has been argued that commitment to a profession is in itself strong enough to warrant citizenship behaviours among professionals, especially when they feel their professions are salient and meaningful, and the citizenship behaviour in question falls within professional mandates.

The ECG is a state owned organization that enjoys monopolistic power in the sense that, it is the only power distribution company that distributes power throughout southern Ghana. Although, the Northern part of Ghana is geographically larger than the Southern part, the southern part happens to be the industrial hub of the country. In view of this, Most Public and Private Corporations, Manufacturing industries, as well as domestic consumers are solely dependent on the organization for a relatively affordable and safer distribution of power. Employees by virtue of these speculations, are bound to view their professions as meaningful and salient. After moderating the transformational leadership-safety relationship with professional commitment, the significant change in results observed was expected. On the contrary, the findings in line with transactional leadership and safety citizenship behaviour was negative. The introduction of a moderator (PC), played no significant role in the fore established relationship.

## CHAPTER SIX

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### 6.1 Introduction

This chapter presents the summary of research findings, conclusions, study limitations, and general recommendations for organizations, academia, and future research.

#### 6.2 Summary of Findings

The study sought to examine the extent to which leadership styles (transformational and transactional) predicted the safety citizenship behaviour of employees, in a power distribution company in southern Ghana, as well as the role commitment to their profession played in this relationship. After testing the relationships between variables under study, analytical results confirmed that, the style of leadership adopted by a leader had a significant impact on the safety citizenship behaviour (SCB) of employees. With transformational leadership, demonstrating a significant positive relationship, whereas, transactional leadership demonstrated a significant negative relationship.

Additionally, the relationship between professional commitment and SCB was tested to determine if commitment to a profession had the propensity to influence employee SCB behaviours. In assessing PC as a unitary construct, results indicated that, indeed PC did have a significant positive relationship with SCB. The researcher went a step further to examine the three dimensions of professional commitment (affective, normative and continuance). Normative professional commitment was found to have a more significant positive relationship with SCB, this was followed by affective professional commitment. Although continuance professional commitment demonstrated a positive relationship, this relationship was however found to be statistically insignificant.

The moderating role of professional commitment was further tested on the leadership, SCB relationship. Results demonstrated that, professional commitment only moderated the transformational leadership and SCB relationship. The hypothesised relationship in line with transactional leadership and SCB relationship however did not hold.

### **6.3 Conclusion**

It is an established truth that, organizations cannot possibly predict and eliminate all forms of hazards in the workplace. It is also generally accepted that it is an arduous task for organizations to clearly spell out broad group of behaviours needed to meet organizational goals and targets, more especially in safety prone settings. In line with these assertions, employees have a role to play in ensuring their safety as well as the safety of other colleagues. This can be achieved by taking proactive steps in the workplace.

Findings from this study confirmed that leadership plays a salient role in the enhancement of safety behaviours at work. Although existing literature posits that both transformational and transactional leadership styles can enhance safety at work, findings from this study suggested otherwise. Results from data, confirmed the positive significant role transformational leaders play with respect to safety at work. Transactional leadership style on the other hand was found to negatively predict the safety citizenship behaviour of employees.

Findings from this study, further echoed assertions made by scholars on the significant but often ignored role that commitment to a profession could play in organizational outcomes with respect to safety. Professional commitment was found to be a significant and salient moderator in the transformational leadership and safety citizenship behaviour relationship.

#### **6.4 Recommendations**

Based on the findings, discussions, and conclusions of this study, the following recommendations were made.

Employees are more likely to engage in citizenship behaviours when they are professionally committed. Again, employees become professionally committed when they are highly convinced that their work, job or profession is meaningful and salient. Organizations must strive to attach importance and salience to every job performed within the organization. In addition, every employee should be made to feel his or her job contributes immensely to organizational growth. Most especially in high risk industries. Again if feasible, organizations should put in concerted efforts to restructure and rebrand various departments and work units. For instance, in the case of the organization used for this study, engineers are segregated from technicians and artisans. They are however exposed to similar risks and occupational hazards. These three functional units could be merged and rebranded as engineering.

A profession has been defined as one requiring education and specialized practise. Organizations must strive to aid their workers to either further their education, or acquire specialized skills, so they can join professional bodies. Cho and Huang (2012) have posited that, professionals have become the corner stone in nearly all organizations. Therefore, young engineers who join the company should be encouraged to take professional engineering exams in order to formally belong to the engineering professional body. Similarly, technicians and artisans should also be encouraged to take up advanced courses to upgrade their professional status.

Findings further revealed that, transformational leaders play a significant role in the professional commitment and SCB relationship. In consonance with this finding, management must pay particular attention to the kind and sort of leaders they assign to safety sites. In addition to this,

personality tests should be conducted on leaders before they are assigned to safety sites. Finally, leadership training seminars should be held as often as possible to train leaders to be more transformational. Additional findings revealed that, employees are bound to exhibit some citizenship behaviours when they are professionally committed. In line with this discovery, Educational policy makers should take concerted steps to tailor the Ghanaian educational system to reflect professionalism. Similarly, organizations should strive to classify jobs as professions.

### **6.5 Limitations of the study**

The use of nonprobability sampling techniques, made it quite difficult to ascertain whether the sample used in this study, was an actual representation of the study population. Secondly, the adoption of only the quantitative approach in measuring the variables under the study, led to a reduction in the accessible population; the inability of some participants to read, write, and fill the questionnaires, meant that they had to be excluded from participating in the study. A mixed method approach could have ensured that viable information from these participants were obtained via interviews. The study also adopted the use of a close ended questionnaire. This did not give room to explore an individual's personal understanding, and definitions of the constructs under study. It is likely that the conceptualized interpretations of these constructs are not in congruence with the perceptions of participants sampled for the study. For instance an individual's own perception and definition of professional commitment was neglected.

Again the research was geographically limited. The study focused on the organizations district offices within the Accra Tema, Nsawam, Mampong, and Ada area. However, there are numerous organizational offices within other geographical areas. This implies that findings from the current study may not be a generalized reflection of all employees within the organization.

Moreover, the use of a single rating method adopted for the study also posed as a limitation. The examination of leadership styles, SCB, and professional commitment were self-rated by employees. It is likely that, there could have been some level of self-report bias in responses obtained, by virtue of social desirability effects, as it is possible that employees did not objectively assess their SCB and or professional commitment. Consequently, responses obtained may not be a true representation of the actual performance of the respondents

### **6.6 Directions for future research**

The findings and conclusions drawn from the research are representative of only employees who fall within Accra East, Accra West, and the Tema district offices. Therefore findings may not be generalized to other districts of the organization. Future research should target other geographical regions within Ghana but outside Accra, Tema, Mampong, Nsawam, and Ada

A mixed methods approach could also be adopted to ensure that respondents who do not have the ability to read and write, can be fairly represented by the use of interviews. The adoption of a mixed methods approach would further aid in the acquisition of rich qualitative data. For example, Ghanaian conceptualizations of who a leader is, as well as what it means to be professionally committed in the Ghanaian context, will be obtained.

Again, variables under study such as safety citizenship behaviours, should be assessed by both leaders and employees to reduce the degree of bias and social desirability effect. In addition, rather than measuring general transformational or transactional leadership styles, studies should focus on the individual facets of these leadership styles to determine which specific leadership behaviours facilitate SCB.

This study was limited to workers within the power distribution sector. Future studies could conduct a comparative study of these three variables among power generation, power transmission, and power distribution companies. Invariably, a different sector, for instance health; which is also considered a high risk profession could be examined. In this case, the study could assess the leadership, safety citizenship behaviour, and professional commitment relationship among medical workers to assess how the variables interact.



## References

- Aarons, G. A. (2006). Transformational and transactional leadership: Association with attitudes toward evidence-based practice. *Psychiatric Services, 57*(8), 1162-1169.
- Acar, A. Z. (2012). Organizational culture, leadership styles and organizational commitment in Turkish logistics industry. *Procedia-Social and Behavioural Sciences, 58*, 217-226.
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*: Sage.
- Ali, A. (2012). The crucial role of leadership in organizations: A review of literature. *International Journal of Independent Research and Studies, 1*(4), 153-161.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational psychology, 63*(1), 1-18.
- Amponsah-Tawiah, K., Dartey-Baah, K., & Ametowo, A. M. (2012). Here comes Another Questionnaire! The Questionnaire Allergy among Business Executives in Ghana. *Industrial Engineering Letters, 2*(2), 50-60
- Amponsah-Tawiah, K., Ntow, M. A. O., & Mensah, J. (2015). Occupational Health and Safety Management and Turnover Intention in the Ghanaian Mining Sector. *Safety and Health at Work*.
- Annan, J.-S., Addai, E. K., & Tulashie, S. K. (2015). A Call for Action to Improve Occupational Health and Safety in Ghana and a Critical Look at the Existing Legal Requirement and Legislation. *Safety and Health at Work*.
- Aranya, N., Pollock, J., & Amernic, J. (1981). An examination of professional commitment in public accounting. *Accounting, Organizations and Society, 6*(4), 271-280.
- Arvey, R. D., Zhang, Z., Avolio, B. J., & Krueger, R. F. (2007). Developmental and genetic determinants of leadership role occupancy among women. *Journal of Applied Psychology, 92*(3), 693.

- Atwater, D. C., & Bass, B. M. (1994). Transformational leadership in teams. Sage publications p p.48-83.
- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*: Sage.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The leadership quarterly*, 6(2), 199-218.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology*, 72(4), 441-462.
- Avolio, B. J., Bass, B. M., & Zhu, F. W. W. (2004). *Multifactor leadership questionnaire: manual and sampler set*: Mind Garden Menlo Park^ eCA CA.
- Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behaviour*, 25(8), 951-968.
- Babbie, E., & Mouton, J. (2001). The practice of social science research. *Cape Town*.
- Babbie, E. R. (1989). *The practice of social research*. Wadsworth Publishing Company.
- Babbie, E. R. (1990). Survey research methods Wadsworth Pub. Co., Belmont, CA.
- Bagraim, J. J. (2003). The dimensionality of professional commitment. *SA Journal of Industrial Psychology*, 29(2), p. 6-9.
- Barling, J., & Hutchinson, I. (2000). Commitment vs. Control-based Safety Practices, Safety Reputation, and Perceived Safety Climate. *Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences De L'administration*, 17(1), 76-84.

- Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology, 87*(3), 488.
- Barnett, T. (2011). Leadership theories and studies. *Reference for Business, Encyclopedia of Business*.
- 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.
- Bartlett, J. E. (2001). II, Kotrlík JW, & Higgins CC. *Organizational research: Determining appropriate sample size in survey research. Inform Tech Learn Perform J, 19*(1), 43-50.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*: Free Press; Collier Macmillan.
- Bass, B. M. (1991). From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics, 18*(3), 19-31.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques.
- Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. *The International Journal of Public Administration, 17*(3-4), 541-554.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), 207.
- Bass, B. M., & Bass, R. (2009). *The Bass handbook of leadership: Theory, research, and managerial applications*: Simon and Schuster.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*: Psychology Press.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behaviour. *The leadership quarterly, 10*(2), 181-217.

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*: Simon and Schuster.
- Baugh, S. G., & Roberts, R. M. (1994). Professional and organizational commitment among engineers: conflicting or complementing? *Engineering Management, IEEE Transactions on*, *41*(2), 108-114.
- Bell, E. C., Willson, M. C., Wilman, A. H., Dave, S., & Silverstone, P. H. (2006). Males and females differ in brain activation during cognitive tasks. *Neuroimage*, *30*(2), 529-538.
- Bennis, W. (1997). Becoming a leader of leaders. *Gibson, R.(ed.)*.
- Bennis, W., & Nanus, B. (1985). *Leadership: The strategies for taking charge*. New York.
- Berson, Y., & Linton, J. D. (2005). An examination of the relationships between leadership style, quality, and employee satisfaction in R&D versus administrative environments. *R&D Management*, *35*(1), 51-60.
- Bhattacharjee, A. (2012). *Social science research: principles, methods, and practices*.
- Blau. (2003). Testing for a four-dimensional structure of occupational commitment. *Journal of occupational and organizational psychology*, *76*(4), 469-488.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Boerner, S., Eisenbeiss, S. A., & Griesser, D. (2007). Follower behaviour and organizational performance: The impact of transformational leaders. *Journal of Leadership & Organizational Studies*, *13*(3), 15-26.
- Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behaviour in schools. *Teaching and teacher education*, *20*(3), 277-289.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *Academy of Management review*, *24*(1), 82-98.
- Bolino, M. C., & Turnley, W. H. (2003). Going the extra mile: Cultivating and managing employee citizenship behaviour. *The Academy of Management Executive*, *17*(3), 60-71.

- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: a meta-analysis. *Journal of Applied Psychology, 89*(5), 901.
- Bosak, J., Coetsee, W. J., & Cullinane, S.-J. (2013). Safety climate dimensions as predictors for risk behaviour. *Accident Analysis & Prevention, 55*, 256-264.
- Brint, S. (2001). Professionals and the Knowledge Economy': Rethinking the Theory of Postindustrial Society. *Current Sociology, 49*(4), 101-132.
- British Safety Council. (2009). Active research: The causes and incidence of occupational accidents and ill health across the globe. Karen Pearson. Retrieved from [http://www.britsafe.org/sites/default/files/editor/the causes and incidence of occupational accidents and ill health across the globe](http://www.britsafe.org/sites/default/files/editor/the%20causes%20and%20incidence%20of%20occupational%20accidents%20and%20ill%20health%20across%20the%20globe).
- Bryman, A. (1992). *Charisma and leadership in organizations*: Sage Publications.
- Bučičūnienė, I., & Škudienė, V. (2008). Impact of leadership styles on employees' organizational commitment in Lithuanian manufacturing companies. *South East European Journal of Economics and Business, 3*(2), 57-66.
- Burns, J. M. (1978). *Leadership* New York, NY: Harper and Row Publishers.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological bulletin, 56*(2), 81.
- Carlyle, T. (1888). *The French revolution: a history*: Chapman & Hall.
- Carson, K. D., & Bedeian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of vocational behaviour, 44*(3), 237-262.
- Chaganti, R., Cook, R. G., & Smeltz, W. J. (2002). Effects of styles, strategies, and systems on the growth of small businesses. *Journal of Developmental Entrepreneurship, 7*(2), 175.
- Chandan, C., & Devi, R. (2014). A Literature Review On Leadership Styles. *Research Journal's Journal of Management, 2*(2), 1-10.

- Chemers, M. M. (2000). Leadership research and theory: A functional integration. *Group Dynamics : Theory, research, and practice*, 4(1), 27.
- Cho, V., & Huang, X. (2012). Professional commitment, organizational commitment, and the intention to leave for professional advancement: An empirical study on IT professionals. *Information Technology & People*, 25(1), 31-54.
- Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety: a meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94(5), 1103.
- Clarke, S. (2013). Safety leadership: A meta-analytic review of transformational and transactional leadership styles as antecedents of safety behaviours. *Journal of occupational and organizational psychology*, 86(1), 22-49.
- Clarke, S., & Ward, K. (2006). The role of leader influence tactics and safety climate in engaging employees' safety participation. *Risk Analysis*, 26(5), 1175-1185.
- Clayton, H. (2012). The changing leadership landscape. *Strategic HR review*, 11(2), 78-83.
- Code, N. (1949). The Nuremberg Code. *Trials of war criminals before the Nuremberg military tribunals under control council law*(10), 181-182.
- Cohen, A. (2006). The relationship between multiple commitments and organizational citizenship behaviour in Arab and Jewish culture. *Journal of vocational behaviour*, 69(1), 105-118.
- Cohen, A., & Kol, Y. (2004). Professionalism and organizational citizenship behaviour: An empirical examination among Israeli nurses. *Journal of managerial psychology*, 19(4), 386-405.
- Collier, P., & Gunning, J. W. (1999). Explaining African economic performance. *Journal of economic literature*, 37(1), 64-111.

- Conchie, S. M., & Donald, I. J. (2009). The moderating role of safety-specific trust on the relation between safety-specific leadership and safety citizenship behaviours. *Journal of Occupational Health Psychology, 14*(2), 137.
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *The leadership quarterly, 10*(2), 145-179.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*: Sage Publications.
- Cooper, D. (2015). Effective Safety Leadership: Understanding Types & Styles That Improve Safety Performance. *Professional Safety, 60*(02), 49-53.
- Creswell, J. W. (2009). Research design: Qualitative and mixed methods approaches. *London and Thousand Oaks: Sage publications*.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*: Sage.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Creswell, J. W., Hanson, W. E., Plano, V. L. C., & Morales, A. (2007). Qualitative research designs selection and implementation. *The counseling psychologist, 35*(2), 236-264.
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational behaviour and human performance, 13*(1), 46-78.
- Dartey-Baah, K. (2015). Resilient leadership: a transformational-transactional leadership mix. *Journal of Global Responsibility, 6*(1), 99-112.
- Dartey-Baah, K., & Ampofo, E. Y. (2015). Examining the Influence of Transformational and Transactional Leadership Styles on Perceived Job Stress among Ghanaian Banking Employees. *International Journal of Business and Management, 10*(8), p161.

- Dash, N. (1993). Research paradigms in education: Towards a resolution. *Journal of Indian Education, 19*(2), 1-6.
- Deanne, N., & Hartog, D. (2001). Leadership in organizations. *Handbook of industrial, Work & Organizational psychology: Volume 2: Organizational Psychology, 166*.
- DeJoy, D. M., Schaffer, B. S., Wilson, M. G., Vandenberg, R. J., & Butts, M. M. (2004). Creating safer workplaces: assessing the determinants and role of safety climate. *Journal of safety research, 35*(1), 81-90.
- Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behaviour. *Journal of occupational and organizational psychology, 67*(4), 315-326.
- Den Hartog, D. N., Van Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of occupational and organizational psychology, 70*, 19-34.
- Dess, G., Picken, J., & Lyon, D. (1998). Transformational leadership. *Journal of Managerial Issues, 10*, 30-44.
- Didla, S., Mearns, K., & Flin, R. (2009). Safety citizenship behaviour: a proactive approach to risk management. *Journal of Risk Research, 12*(3-4), 475-483.
- Diefendorff, J. M., Brown, D. J., Kamin, A. M., & Lord, R. G. (2002). Examining the roles of job involvement and work centrality in predicting organizational citizenship behaviours and job performance. *Journal of Organizational Behaviour, 23*(1), 93-108.
- Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management review, 11*(3), 618-634.
- Duarte, M. B. (2015). Organisational and professional commitments: The influence in nurses' organisational citizenship behaviours. *Tékhné*.
- DuBrin, A. J. (2010). *Principles of leadership: South-Western Canada*.

- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange integrating the past with an eye toward the future. *Journal of management*, 38(6), 1715-1759.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. J. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension: United Kingdom: Emerald Group Publishing Limited.
- Eid, J., Helge Johnsen, B., Bartone, P. T., & Arne Nissestad, O. (2008). Growing transformational leaders: exploring the role of personality hardiness. *Leadership & Organization Development Journal*, 29(1), 4-23.
- Eid, J., Mearns, K., Larsson, G., Laberg, J. C., & Johnsen, B. H. (2012). Leadership, psychological capital and safety research: Conceptual issues and future research questions. *Safety science*, 50(1), 55-61.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51.
- Elsler, D., Flintrop, J., Kaluza, S., Hauke, A., Starren, A., Drupsteen, L., & Bell, N. (2012). Leadership and occupational safety and health (OSH): an expert analysis.
- Emory, C. W., & Cooper, D. R. (1991). *Business Research Methods*. Homewood IL: Richard D. Irwin: Inc.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, 40(4), 988-1010.
- Fasola, O., Adeyemi, M., & Olowe, F. (2013). Exploring the relationship between transformational, transactional leadership style and organizational commitment among Nigerian banks employees. *International Journal of Academic Research in Economics and Management Sciences*, 2(6), 96.
- Field, A. (2009). *Discovering statistics using SPSS*: Sage publications.

- Fielder, F. (1967). *A Theory of Leadership Effectiveness* McGraw Hill. *New York*.
- Flin, R., & Yule, S. (2004). Leadership for safety: industrial experience. *Quality and Safety in Health Care*, 13(suppl 2), ii45-ii51.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.
- Fullan, M. (2006). Leading professional learning. *School Administrator*, 63(10), 10.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction*: Longman Publishing.
- Gambino, K. M. (2010). Motivation for entry, occupational commitment and intent to remain: a survey regarding Registered Nurse retention. *Journal of Advanced Nursing*, 66(11), 2532-2541.
- Gerpott, T. J., Domsch, M., & Keller, R. T. (1988). Career Orientations in different countries and companies: An empirical investigation of West German, British and US in industrial R&D professionals [1]. *Journal of Management Studies*, 25(5), 439-462.
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader–member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827.
- Gittleman, J. L., Gardner, P. C., Haile, E., Sampson, J. M., Cigularov, K. P., Ermann, E. D., . . . Chen, P. Y. (2010). [Case Study] CityCenter and Cosmopolitan Construction Projects, Las Vegas, Nevada: Lessons learned from the use of multiple sources and mixed methods in a safety needs assessment. *Journal of safety research*, 41(3), 263-281.
- Goetsch, D. L. (2011). *Occupational Safety and Health for Technologists, Engineers, and*
- Goleman, D. (2000). Leadership that gets results.
- Gordon, A., & Yukl, G. (2004). The future of leadership research: Challenges and opportunities. *Zeitschrift für Personalforschung/German Journal of Research in Human Resource Management*, 359-365.

- Goulet, L. R., & Singh, P. (2002). Career commitment: a reexamination and an extension. *Journal of vocational behaviour, 61*(1), 73-91.
- Graen, G. (1976). Role-making process within complex organizations. *Handbook of Industrial and organizational psychology, 1201,1245*.
- Graen, G., & Cashman, J. F. (1975). A role-making model of leadership in formal organizations: A developmental approach. *Leadership frontiers, 143, 165*.
- 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. *The leadership quarterly, 6*(2), 219-247.
- Gregory, I. (2003). *Ethics in research*: A&C Black.
- Griffin, M. A., & Hu, X. (2013). How leaders differentially motivate safety compliance and safety participation: the role of monitoring, inspiring, and learning. *Safety science, 60*, 196-202.
- Griffin, M. A., & Neal, A. (2000). Perceptions of safety at work: a framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology, 5*(3), 347.
- Guba, E. G. (1990). *The paradigm dialog*: Sage Publications.
- Gyekye, S. A., & Salminen, S. (2005). Are “good soldiers” safety conscious? An examination of the relationship between organizational citizenship behaviours and perception of workplace safety. *Social Behaviour and Personality: an international journal, 33*(8), 805-820.
- Gylfason, T., & Zoega, G. (2006). Natural resources and economic growth: The role of investment. *The World Economy, 29*(8), 1091-1115.

- Hackman, J. R., & Wageman, R. (2009). Foster team effectiveness by fulfilling key leadership functions. *Handbook of principles of organizational behaviour: indispensable knowledge for evidence-based management*, 275-294.
- Hair, Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6): Pearson Prentice Hall Upper Saddle River, NJ.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis: A Global perspective* (7<sup>th</sup> eds.) Pearson Education Inc. *Upper Saddle River, New Jersey*.
- Hall, J., Johnson, S., Wysocki, A., & Kepner, K. (2002). *Transformational Leadership: Transformation of Managers and Associates*: University of Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, EDIS.
- Hämäläinen, P., Takala, J., & Saarela, K. L. (2006). Global estimates of occupational accidents. *Safety science*, 44(2), 137-156.
- Hamstra, M. R., Van Yperen, N. W., Wisse, B., & Sassenberg, K. (2015). Transformational-transactional leadership styles and followers' regulatory focus. *Journal of Personnel Psychology*.
- Health and Safety Executive.(2013). Health and Safety Annual report for Great Britain (2013/2014) retrieved from <http://www.hse.UK/statistics/causdis/index.htm>.
- Hargis, M. B., Watt, J. D., & Piotrowski, C. (2011). Developing leaders: Examining the role of transactional and transformational leadership across business contexts. *Organization Development Journal*, 29(3), 51.
- Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73(4), 695.
- Hirschberg, S., Burgherr, P., Spiekerman, G., & Dones, R. (2004). Severe accidents in the energy sector: comparative perspective. *Journal of Hazardous Materials*, 111(1), 57-65.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American psychologist*, 44(3), 513.

- Hoffmeister, K., Gibbons, A. M., Johnson, S. K., Cigularov, K. P., Chen, P. Y., & Rosecrance, J. C. (2014). The differential effects of transformational leadership facets on employee safety. *Safety science*, 62, 68-78.
- Hofmann, D. A., & Morgeson, F. P. (1999). Safety-related behaviour as a social exchange: The role of perceived organizational support and leader-member exchange. *Journal of Applied Psychology*, 84(2), 286.
- Hofmann, D. A., Morgeson, F. P., & Gerras, S. J. (2003). Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: safety climate as an exemplar. *Journal of Applied Psychology*, 88(1), 170.
- Hofmann, D. A., & Stetzer, A. (1996). A cross-level investigation of factors influencing unsafe behaviours and accidents. *Personnel Psychology*, 49(2), 307-339.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative science quarterly*, 321-339.
- House, R. J., & Shamir, B. (1993). Toward the integration of transformational, charismatic, and visionary theories.
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6), 891.
- Hussain Haider, M., & Riaz, A. (2010). Role of transformational and transactional leadership with job satisfaction and career satisfaction. *Business and Economic Horizons*(01), 29-38.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviours: a meta-analysis. *Journal of Applied Psychology*, 92(1), 269.
- ILO.(2014a).Number of Work related Accidents and Illness continues to Increase ILO/WHO Joint press release, Bank Regions.

- Inness, M., Turner, N., Barling, J., & Stride, C. B. (2010). Transformational leadership and employee safety performance: A within-person, between-jobs design. *Journal of Occupational Health Psychology, 15*(3), 279.
- Irshad, R., & Hashmi, M. S. (2014). How Transformational Leadership is related to Organizational Citizenship Behaviour? The Mediating Role of Emotional Intelligence. *Pakistan Journal of Commerce and Social Sciences, 8*(2), 413-425.
- Irving, P. G., Coleman, D. F., & Cooper, C. L. (1997). Further assessments of a three-component model of occupational commitment: Generalizability and differences across occupations. *Journal of Applied Psychology, 82*(3), 444.
- Jeffrey, C., Weatherholt, N., & Lo, S. (1996). Ethical development, professional commitment and rule observance attitudes: A study of auditors in Taiwan. *The international journal of accounting, 31*(3), 365-379.
- Jha, S. (2014). Transformational leadership and psychological empowerment: Determinants of organizational citizenship behaviour. *South Asian Journal of Global Business Research, 3*(1), 18-35.
- Kamukama, N., Ahiauzu, A., & Ntayi, J. M. (2010). Intellectual capital and performance: testing interaction effects. *Journal of Intellectual Capital, 11*(4), 554-574.
- Kapp, E. (2012). The influence of supervisor leadership practices and perceived group safety climate on employee safety performance. *Safety science, 50*(4), 1119-1124.
- Kara, D., Uysal, M., Sirgy, M. J., & Lee, G. (2013). The effects of leadership style on employee well-being in hospitality. *International Journal of Hospitality Management, 34*, 9-18.
- Karip, E. (1998). Transformational leadership. *Educational Administration in Theory and Practice, 4*(16), 443-465.
- Katz, D. (1964). The motivational basis of organizational behaviour. *Behavioural science, 9*(2), 131-146.

- Kaur, R. (2012). Transformational and transactional leadership behaviour in selected public and private sector banks in Chandigarh. *University Business School, Punjab University, India. International Journal of Engineering and Management Sciences*, 3(2), 126-133.
- Kellerman, B. (1984). *Leadership: multidisciplinary perspectives*: Prentice-Hall Englewood Cliffs, NJ.
- Kelloway, E. K., Mullen, J., & Francis, L. (2006). Divergent effects of transformational and passive leadership on employee safety. *Journal of Occupational Health Psychology*, 11(1), 76.
- Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress*, 26(1), 39-55.
- Khan, N. R., Ghouri, A. M., & Awang, M. (2013). Leadership styles and organizational citizenship behaviour in small and medium scale firms. *Researchers World-Journal of Arts, Science & Commerce*, 4(2), 153-163.
- Kirkman, B. L., & Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal*, 44(3), 557-569.
- Kline, R. B. (2005). Principles and practice of structural equation modeling. Guilford Press. *New York*, 59.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*: New Age International.
- Kotrlik, J., & Higgins, C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information technology, learning, and performance journal*, 19(1), 43.
- Kozlowski, S. W., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. *Journal of Applied Psychology*, 74(4), 546.

- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ psychol meas.*
- Krishnan, V. R. (2005). Leader-member exchange, transformational leadership, and value system.
- Kuchinke, K. P. (1999). Leadership and culture: work-related values and leadership styles among one company's US and German telecommunication employees. *Human Resource Development Quarterly*, 10(2), 135-154.
- Kuhn, T. S. (1970). *The Structure of scientific Revolution*, 2<sup>nd</sup> enl. ed: University of Chicago press.
- Kuhnert, K. W., & Lewis, P. (1987). Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management review*, 12(4), 648-657.
- Kular, S., Gatenby, M., Rees, C., Soane, E., & Truss, K. (2008). *Employee engagement: a literature review*: Kingston Business School, Kingston University.
- Kumekpor, T. K. (2002). *Research methods and techniques of social research*: SonLife Press & Services.
- Lachman, R., & Aranya, N. (1986). Job attitudes and turnover intentions among professionals in different work settings. *Organization Studies*, 7(3), 279-293.
- Lado, A. A., Boyd, N. G., & Wright, P. (1992). A competency-based model of sustainable competitive advantage: Toward a conceptual integration. *Journal of management*, 18(1), 77-91.
- Lai, A. (2011). Transformational-transactional leadership theory.
- Lam, C. S., & O'Higgins, E. R. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organization Development Journal*, 33(2), 149-174.

- Laohavichien, T., Fredendall, L. D., & Cantrell, R. S. (2009). The effects of transformational and transactional leadership on quality improvement. *The Quality Management Journal*, 16(2), 7.
- Lee, Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: relations with person-and work-related variables. *Journal of Applied Psychology*, 85(5), 799.
- Lee, Kim, H. K., & Kim, Y. H. (2013). Determinants of organizational citizenship behaviour and its outcomes. *Global business and management research: An international journal*, 5(1), 54-65.
- Lekka, C., & Healey, N. (2012). A review of the literature on effective leadership behaviours for safety. *The Health and Safety Executive (HSE), Harpur Hill Buxton Derbyshire SK17 9JN*.
- Lewin, K. (1935). A dynamic theory of personality: Selected papers (DK Adams & KE Zener, Trans.). *New York: McGraw*.
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human resource management review*, 16(2), 139-154.
- Lian, L. K., & Tui, L. G. (2012). Leadership styles and organizational citizenship behaviour: The mediating effect of subordinates' competence and downward influence tactics. *Journal of Applied Business and Economics*, 13(2), 59-96.
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23(3), 451-465.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in personnel and human resources management*, 15, 47-120.

- Lin, R. S.-J., & Hsiao, J.-K. (2014). The Relationships between Transformational Leadership, Knowledge Sharing, Trust and Organizational Citizenship Behaviour. *International Journal of Innovation, Management and Technology*, 5(3), 171.
- Ling, S. L. M., & Ibrahim, M. S. (2013). Transformational Leadership and Teacher Commitment in Secondary Schools of Sarawak. *International Journal of Independent Research and Studies*, 2(2), 51-65.
- Lo, M.-C., Ramayah, T., Min, H. W., & Songan, P. (2010). The relationship between leadership styles and organizational commitment in Malaysia: role of leader–member exchange. *Asia Pacific business review*, 16(1-2), 79-103.
- Lowe, K. B., & Gardner, W. L. (2001). Ten years of the leadership quarterly: Contributions and challenges for the future. *The leadership quarterly*, 11(4), 459-514.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The leadership quarterly*, 7(3), 385-425.
- Lunenburg, F. C. (2010). Leader-member exchange theory: Another perspective on the leadership process. *International Journal of Management, Business and Administration*, 13(1), 1-5.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in educational research*, 16(2), 193-205.
- Madhu, B., & Krishnan, V. R. (2005). Impact of transformational leadership and karma-yoga on organizational citizenship behaviour. *Prestige Journal of management and research*, 9(1), 1-20.
- Magdalena, S. M. (2009). Professional Commitment in Teachers: Comparative Study. *University of Ruse*, (48), 148-150.

- Martínez-Córcoles, M., Gracia, F., Tomás, I., & Peiró, J. M. (2011). Leadership and employees' perceived safety behaviours in a nuclear power plant: a structural equation model. *Safety science*, 49(8), 1118-1129.
- Masllyn, J. M., & Uhl-Bien, M. (2001). Leader–member exchange and its dimensions: Effects of self-effort and other's effort on relationship quality. *Journal of Applied Psychology*, 86(4), 697.
- Maxwell, J. C. (2007). *The 21 irrefutable laws of leadership: Follow them and people will follow you*: Thomas Nelson Inc.
- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, 5(4), 117-130.
- McGrath, R. G. (2013). *The end of competitive advantage: How to keep your strategy moving as fast as your business*: Harvard Business Review Press.
- Meixner, W. F., & Bline, D. M. (1989). Professional and job-related attitudes and the behaviours they influence among governmental accountants. *Accounting, Auditing & Accountability Journal*, 2(1), 0-0.
- Mertens, D. M., & Ginsberg, P. E. (2009). *The handbook of social research ethics*: Sage.
- Meyer, J. P., & Allen, N. J. (2004). TCM employee commitment survey academic users guide 2004. London, Ontario, Canada: The University of Western Ontario, Department of Psychology.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538.
- Ministry of Health and Ghana Health Service Report. Creating Wealth through health. The health sector programme for work. Accra (Ghana): Ghana Health Services; 2007. 12p
- Mosadeghrad, A. (2003). Principles of health care administration. *Dibagran Tehran, Tehran*.

- Mullen, J. E., & Kelloway, E. K. (2009). Safety leadership: A longitudinal study of the effects of transformational leadership on safety outcomes. *Journal of occupational and organizational psychology*, 82(2), 253-272.
- Murphy, S. E., & Ensher, E. A. (1999). The Effects of Leader and Subordinate Characteristics in the Development of Leader–Member Exchange Quality<sup>1</sup>. *Journal of Applied Social Psychology*, 29(7), 1371-1394.
- Murray, C. J., & Lopez, A. D. (1997). Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *The Lancet*, 349(9064), 1498-1504.
- Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behaviour, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946.
- Neal, A., Griffin, M. A., & Hart, P. M. (2000). The impact of organizational climate on safety climate and individual behaviour. *Safety science*, 34(1), 99-109.
- Nikezić, S., Dašić, P., & Bojić, B. (2012). *Contingency Leadership Approach: Paradigm for Change*. Paper presented at the 2th International Conference, Economics and Management–Based on New Technologies “EMoNT.
- Nikezić, S., Purić, S., & Purić, J. (2012). Transactional and transformational leadership: Development through changes. *International Journal for Quality Research*, 6(3), 285-296.
- Northouse. (2001). Leadership Theory and Practice. *Organization Studies-Berlin-European Group for Organizational Studies*, 20(2).
- Northouse. (2014). *Introduction to leadership: Concepts and practice*: Sage Publications.
- O'Leary, Z. (2004). *The essential guide to doing research*: Sage.
- Odumeru, J. A., & Ifeanyi, G. (2013). Transformational vs. Transactional leadership theories: Evidence in literature. *International Review of Management and Business Research*, 2(2), 355-361.

- Ojokuku, R., & Sajuyigbe, A. (2012). The Impact of Electronic Banking on Human Resources Performance in the Nigerian Banking Industry. *International Journal of Economic Development Research and Investment*, 3(2), 61-69.
- Organ, D. W. (1988). *Organizational citizenship behaviour: The good soldier syndrome*: Lexington Books/DC Heath and Com.
- Pallant. (2011). *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. Australia: Allen & Unwin.
- Pallant, J. (2001) *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. Australia: Allen & Unwin
- Pastor, J. C., & Mayo, M. (2006). Transformational and Transactional Leadership: An Examination of Managerial Cognition Among Spanish Upper Echelons. *Instituto de Empresa Business School Working Paper No. WP06-13*.
- Patel, B. (2010). The importance of resilience in leadership. *Clore Social Leadership Programme*.
- Persson, J., Herlitz, A., Engman, J., Morell, A., Sjölie, D., Wikström, J., & Söderlund, H. (2013). Remembering our origin: gender differences in spatial memory are reflected in gender differences in hippocampal lateralization. *Behavioural brain research*, 256, 219-228.
- Pfeffer, J. (1998). Seven practices of successful organizations. *California management review*, 40(2), 96-124.
- Pillai, R., & Williams, E. A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment, and performance. *Journal of organizational change management*, 17(2), 144-159.
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of management*, 36(1), 94-120.

- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviours: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of management*, 26(3), 513-563.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603.
- Povah, L. (2012). Assessing leaders for the future. *Industrial and Commercial Training*, 44(5), 250-258.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*: Sage.
- Puplampu, B. B., & Quartey, S. H. (2012). Key Issues on occupational health and safety practices in Ghana: A Review. *International Journal of Business and Social Science*, 3(19), 151-156.
- Qaiser Danish, R., Aslam, N., Cheema, A. S., & Hassan, U. (2014). The impact of transformational leadership and employee commitment on organizational citizenship behaviour. *Science International*, 26(5).
- Rafiq Awan, M., & Mahmood, K. (2010). Relationship among leadership style, organizational culture and employee commitment in university libraries. *Library Management*, 31(4/5), 253-266.
- Rainlall, S. (2004). A review of employee motivation theories and their implications for employee retention within organizations. *The journal of American academy of business*, 9, 21-26.
- Ramachandran, S., & Krishnan, V. R. (2009). Effect of transformational leadership on followers' affective and normative commitment: culture as moderator.

- Rauch, C., & Behling, O. (1984). Functionalism: Basis for an alternate approach to the study of leadership. *Leaders and managers: International perspectives on managerial behaviour and leadership*, 45-62.
- Resnik, D. B. (2011). *What is Ethics in Research & Why is it Important?* Paper presented at the The national.
- Riaz, T., Akram, M. U., & Ijaz, H. (2011). Impact of transformational leadership style on affective employees commitment: an empirical study of banking sector in Islamabad (Pakistan). *The Journal of Commerce*, 3(1), 43-51.
- Robb, D. (2000). Building Resilient Organizations Resilient Organizations actively build and integrate Performance and Adaptive Skills. *OD Practitioner*, 32(3), 27-32.
- Robbins, S. P., & Coulter, M. (2007). Principles of management. *Translated by Seyyed Mohammad Arabi and Mohammed Ali Hamid Rafiee and Behrouz Asrari Ershad, Fourth Edition, Tehran: Office of Cultural Studies.*
- Saeed, A., & Ahmad, S. (2012). Perceived Transformational Leadership Style and Organizational Citizenship Behaviour: A Case Study of Administrative Staff of University of the Punjab. *European Journal of Business and Management*, 4(21), 150-158.
- Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership & Organizational Studies*, 15(2), 145-158.
- Sarwar, A., Mumtaz, M., & Ikram, S. (2015). Improving Organizational Citizenship Behaviour through Transformational Leadership: Mediating role of Trust in Leader. *Asian Journal of Business Management*, 7(2), 28-36.
- Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2): John Wiley & Sons.
- Sekaran, U., & Bougie, R. (2003). *Research methodology for business*: New York: John Wiley & Sons, Inc.

- Selznick, P. (2011). *Leadership in administration: A sociological interpretation*: Quid Pro Books.
- Seo, D.-C. (2005). An explicative model of unsafe work behaviour. *Safety science*, 43(3), 187-211.
- Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81(3), 219.
- Shamir, B., & Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *The leadership quarterly*, 10(2), 257-283.
- Sharma, J., Dhar, R. L., Garavan, T., & Pezet, E. (2016). Factors influencing job performance of nursing staff: mediating role of affective commitment. *Personnel Review*, 45(1).
- Shavelson, R. J. (1988). Statistical reasoning for the behavioural sciences.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46(6), 703-714.
- Sivanathan, N., Turner, N., & Barling, J. (2005). *Effects of Transformational Leadership Training on Employee Safety Performance: A Quasi-Experiment Study*. Paper presented at the Academy of Management Proceedings.
- Smith, C., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behaviour: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653.
- Sønderstrup-Andersen, H. H., Carlsen, K., Kines, P., Bjørner, J. B., & Roepstorff, C. (2011). Exploring the relationship between leadership style and safety climate in a large scale danish cross-sectional study. *Safety Science Monitor*, 15(1), 1-9.
- Sparrowe, R. T., & Liden, R. C. (1997). Process and structure in leader-member exchange. *Academy of Management review*, 22(2), 522-552.

- Stamper, C. L., & Dyne, L. V. (2001). Work status and organizational citizenship behaviour: A field study of restaurant employees. *Journal of Organizational Behaviour*, 22(5), 517-536.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of the literature*: New York: Free Press.
- Street, D. L., Schroeder, R. G., & Schwartz, B. (1993). The central life interests and organizational professional commitment of men and women employed by public accounting firms. *Advances in Public Interest Accounting*, 5(1), 201-229.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*: Thomson/Brooks/Cole.
- Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate statistics*.
- Taylor, B., Kermode, S., & Roberts, K. (2007). *Research in Nursing and Health Care: Evidence for Practice*, Sydney: Thomson.
- Teng, C.-I., Shyu, Y.-I. L., & Chang, H.-Y. (2007). Moderating effects of professional commitment on hospital nurses in Taiwan. *Journal of Professional Nursing*, 23(1), 47-54.
- Tepper, B. J., Eisenbach, R. J., Kirby, S. L., & Potter, P. W. (1998). Test of a justice-based model of subordinates' resistance to downward influence attempts. *Group & Organization Management*, 23(2), 144-160.
- Thamrin, H. (2012). The Influence of Transformational Leadership and Organizational Commitment on Job Satisfaction and Employee Performance. *International Journal of Innovation, Management and Technology*, 3(5), 566.
- Thomas, T. L., Stolley, P. D., Stemhagen, A., Fontham, E. T., Bleecker, M. L., Stewart, P. A., & Hoover, R. N. (1987). Brain tumor mortality risk among men with electrical and electronics jobs: a case-control study. *Journal of the National Cancer Institute*, 79(2), 233-238.

- Truckenbrodt, Y. B. (2000). The relationship between leader-member exchange and commitment and organizational citizenship behaviour. *Acquisition Review Quarterly*, 7(3), 233.
- U S Department of Labour, Bureau of labour statistics. (2012). Census of fatal occupational injuries: Safety and Health Administration. <http://www.aflcoi.org>.
- Ugboro, I. O., & Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction, and customer satisfaction in TQM organizations: an empirical study. *Journal of Quality management*, 5(2), 247-272.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviours: Evidence of construct and predictive validity. *Academy of Management Journal*, 41(1), 108-119.
- Vandenberg, R. J., & Scarpello, V. (1994). A longitudinal assessment of the determinant relationship between employee commitments to the occupation and the organization. *Journal of Organizational Behaviour*, 15(6), 535-547.
- VanYperen, N. W., Berg, A. E., & Willering, M. C. (1999). Towards a better understanding of the link between participation in decision-making and organizational citizenship behaviour: A multilevel analysis. *Journal of occupational and organizational psychology*, 72(3), 377-392.
- Waldman, D. A., Bass, B. M., & Yammarino, F. J. (1990). Adding to contingent-reward behaviour the augmenting effect of charismatic leadership. *Group & Organization Management*, 15(4), 381-394.
- Walliman, N. (2006). *Social research methods*: Sage.
- Walliman, N. (2011). *Your research project: Designing and planning your work*: Sage Publications.
- Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and US financial firms. *Human Resource Development Quarterly*, 16(2), 235-256.

- Wang, & Shen. (2012). An Investigation into the Professional Commitment of Chinese Project Management Professionals. *International Journal of Business and Management*, 7(10), p156.
- Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X.(2005). Leader member exchange as a mediator of the relationship between transformational leadership and followers performance and organizational citizenship behaviour . *Academy of Management Journal*, 48(3), 420-432.
- Wang, X., & Armastrong. (2004). An empirical study of PM professionals commitment to their profession and employing organizations. *International Journal of project management*, 22(5),337-386.
- Wayne, S. J., & Green, S. A. (1993). The effects of leader-member exchange on employee citizenship and impression management behaviour. *Human relations*, 46(12), 1431-1440.
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, 87(3), 590.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2008). Organizing for high reliability: Processes of collective mindfulness. *Crisis management*, 3, 81-123.
- Wehrich, H., Cannice, M., & Koontz, H. (2008). Management-globalization and entrepreneurship perspectives. *Economic Science Press, Beijing*.
- Wells, J. E., & Welty Peachey, J. (2011). Turnover intentions: do leadership behaviours and satisfaction with the leader matter? *Team Performance Management: An International Journal*, 17(1/2), 23-40.
- Welsch, H. P., & LaVan, H. (1981). Inter-relationships between organizational commitment and job characteristics, job satisfaction, professional behaviour, and organizational climate. *Human relations*, 34(12), 1079-1089.

- Xuesheng, D., & Xintao, Z. (2011). An empirical investigation of the influence of safety climate on safety citizenship behaviour in coal mine. *Procedia engineering*, 26, 2173-2180.
- Yammarino, F. J., & Bass, B. M. (1990). Transformational leadership and multiple levels of analysis. *Human relations*, 43(10), 975-995.
- Yang, L.-S., Yang, H.-H., Chen, H.-T., Chang, M.-F., Chiu, Y.-F., Chou, Y.-W., & Cheng, Y.-C. (2012). A study of nurses' job satisfaction: The relationship to professional commitment and friendship networks.
- Yousef, D. A. (2000). Organizational commitment: A mediator of the relationships of leadership behaviour with job satisfaction and performance in a non-western country. *Journal of managerial psychology*, 15(1), 6-24.
- Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of management*, 15(2), 251-289.
- Yukl, G., Kim, H., & Falbe, C. M. (1996). Antecedents of influence outcomes. *Journal of Applied Psychology*, 81(3), 309.
- Yukl, G., & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research*, 62(2), 81.
- Yukl, G., O'Donnell, M., & Taber, T. (2009). Influence of leader behaviours on the leader-member exchange relationship. *Journal of managerial psychology*, 24(4), 289-299.
- Zacharatos, A., Barling, J., & Iverson, R. D. (2005). High-performance work systems and occupational safety. *Journal of Applied Psychology*, 90(1), 77.
- Zhu, W., Chew, I. K., & Spangler, W. D. (2005). CEO transformational leadership and organizational outcomes: The mediating role of human-capital-enhancing human resource management. *The leadership quarterly*, 16(1), 39-52.
- Zohar, D. (2002). The effects of leadership dimensions, safety climate, and assigned priorities on minor injuries in work groups. *Journal of Organizational Behaviour*, 23(1), 75-92.

## APPENDICES

### Appendix A: Questionnaire

**University of Ghana Business School  
Department of Organizational and Human Resource Management**

---

Dear Respondent,

This questionnaire aims at soliciting information for an MPhil thesis being undertaken to establish the influence of leadership styles on employee safety citizenship behaviour: The moderating role of professional commitment. Your opinion is of outmost importance to the study and any information provided will be treated as **confidential** and **for academic purposes only**.

This questionnaire will take less than 15 minutes to complete. There are **FOUR** sections. **Section 1** comprises Demographic Background; **Section 2**: professional commitment; **Section 3**: Safety citizenship behaviour **section 4 leadership styles: (transformational and transactional)**

In case of any questions with regards to this study, please do not hesitate to contact me on 0244 645 685 or via: [addoteyangelina@yahoo.com](mailto:addoteyangelina@yahoo.com). Thank You

#### Section 1: Demographic Background (Please tick [x] in the box that best describes you)

1. Age
 

|                 |                |                 |
|-----------------|----------------|-----------------|
| Below 21yrs [ ] | 21 – 30yrs [ ] | 31 – 40yrs [ ]  |
| 41 – 50yrs [ ]  | 51 – 60yrs [ ] | Above 60yrs [ ] |
2. Gender:
 

|            |          |
|------------|----------|
| Female [ ] | Male [ ] |
|------------|----------|
3. Highest level of education achieved:
 

|  |                           |
|--|---------------------------|
| SSCCE/WASSCE/Technical Certificate [ ] | High National Diploma [ ] |
| Bachelor Degree [ ]                    | Master’s Degree [ ]       |
| other(s) [ ] Please specify: .....     |                           |
4. How long have you been working with your organization
 

|                       |              |               |                |
|-----------------------|--------------|---------------|----------------|
| Below 1 year [ ]      | 1-5years [ ] | 6-10years [ ] | 11-15years [ ] |
| More than 20years [ ] |              |               |                |
5. Terms of Employment
 

|                   |                     |                      |
|-------------------|---------------------|----------------------|
| Casual Worker [ ] | Contract Worker [ ] | Permanent Worker [ ] |
|-------------------|---------------------|----------------------|
6. What is your Job Title?
 

|              |                     |             |
|--------------|---------------------|-------------|
| Engineer [ ] | technical staff [ ] | Artisan [ ] |
|--------------|---------------------|-------------|

Other title Please specify: .....

**SECTION 2**

Listed below are a number of statements that could be used to describe a variety of factors relating to professional commitment please read each statement carefully and indicate the extent to which you **AGREE** or **DISAGREE** with each statement by ticking the appropriate number on the following scale.

**1-Strongly Disagree                      2-Disagree                      3-Not Sure                      4-Agree                      5-Strongly Agree**

| <b>Professional commitment</b> |   | Strongly disagree | disagree | Not sure | agree | Strongly agree |
|--------------------------------|---|-------------------|----------|----------|-------|----------------|
| 1.                             | Being in this profession is important to my self-image  | 1                 | 2        | 3        | 4     | 5              |
| 2.                             | I regret having entered this profession   | 1                 | 2        | 3        | 4     | 5              |
| 3.                             | I am proud to be in this profession   | 1                 | 2        | 3        | 4     | 5              |
| 4.                             | I dislike being in this profession  | 1                 | 2        | 3        | 4     | 5              |
| 5.                             | I do not identify with this profession  | 1                 | 2        | 3        | 4     | 5              |
| 6.                             | I am enthusiastic about being in this profession  | 1                 | 2        | 3        | 4     | 5              |
| 7                              | I have put too much into this profession to consider changing now   | 1                 | 2        | 3        | 4     | 5              |
| 8                              | Changing professions now would be difficult for me to do  | 1                 | 2        | 3        | 4     | 5              |
| 9                              | Too much of my life would be disrupted if I were to change my profession  | 1                 | 2        | 3        | 4     | 5              |
| 10                             | It would be costly for me to change my profession now   | 1                 | 2        | 3        | 4     | 5              |
| 11                             | There are no pressures to keep me from changing profession  | 1                 | 2        | 3        | 4     | 5              |
| 12                             | Changing professions now would require considerable personal sacrifice  | 1                 | 2        | 3        | 4     | 5              |
| 13                             | I believe people who have been trained in a profession have a responsibility to stay in that profession for a reasonable period of time | 1                 | 2        | 3        | 4     | 5              |
| 14                             | I do not feel any obligation to remain in this profession   | 1                 | 2        | 3        | 4     | 5              |
| 15                             | I feel a responsibility to continue in this profession  | 1                 | 2        | 3        | 4     | 5              |
| 16                             | Even if it were to my advantage, I do not feel that it would be right to leave this profession now                                      | 1                 | 2        | 3        | 4     | 5              |
| 17                             | I would feel guilty if I left the this profession   | 1                 | 2        | 3        | 4     | 5              |
| 18                             | I am in this profession because of a sense of loyalty to the profession   | 1                 | 2        | 3        | 4     | 5              |
|                                |   | 1                 | 2        | 3        | 4     | 5              |
|                                |   | 1                 | 2        | 3        | 4     | 5              |

## SECTION 3

The following are a number of statements that could be used to describe specific factors relating to safety citizenship behaviour. Please read each statement carefully and indicate the extent to which you agree with each statement by ticking the appropriate number on the following scale. Scale anchors consisted of

1- Expected part of my job

2-part of my job

3- somewhat above and beyond-

what is expected for my job

4-not expected part of my job

5-definitely above and beyond-

| Safety citizenship behaviour |  | expecte<br>d part<br>of my<br>job | part of<br>my job | Somewhat<br>above and<br>beyond<br>what is<br>expected for | Not<br>expect<br>ed part<br>of my<br>job | Definitely<br>above and<br>beyond what<br>is expected<br>for my job |
|------------------------------|--|-----------------------------------|-------------------|--|--|---|
| 1.                           | I volunteer for safety committees  | 1                                 | 2                 | 3  | 4  | 5   |
| 2.                           | I help teach safety procedures to new crew members   | 1                                 | 2                 | 3  | 4  | 5   |
| 3.                           | I assist others to make sure they perform their work safely,                                     | 1                                 | 2                 | 3  | 4  | 5   |
| 4.                           | I get involved in safety activities to help my crew work more safely,                            | 1                                 | 2                 | 3  | 4  | 5   |
| 5.                           | I help other crew members learn about safe work practices  | 1                                 | 2                 | 3  | 4  | 5   |
| 6.                           | I help others with safety related responsibilities.  | 1                                 | 2                 | 3  | 4  | 5   |
| 7.                           | I make safety-related recommendations about work activities                                      | 1                                 | 2                 | 3  | 4  | 5   |
| 8.                           | I speak up and encourage others to get involved in safety issues                                 | 1                                 | 2                 | 3  | 4  | 5   |
| 9.                           | I express opinions on safety matters even if others disagree                                     | 1                                 | 2                 | 3  | 4  | 5   |
| 10.                          | I raise safety concerns during planning sessions.  | 1                                 | 2                 | 3  | 4  | 5   |
| 11.                          | I protect fellow crew members from safety hazards  | 1                                 | 2                 | 3  | 4  | 5   |
| 12.                          | I go out of my way to look out for the safety of other crew members,                             | 1                                 | 2                 | 3  | 4  | 5   |
| 13                           | I take action to protect other crew members from risky situations,                               | 1                                 | 2                 | 3  | 4  | 5   |
| 14                           | I try to prevent other crew members from being injured on the job, and                           | 1                                 | 2                 | 3  | 4  | 5   |
| 15                           | I take action to stop safety violations in order to protect the well-being of other Crew members | 1                                 | 2                 | 3  | 4  | 5   |
| 16                           | I explain to other crew members that I will report safety violations                             | 1                                 | 2                 | 3  | 4  | 5   |
| 17                           | I tell other crew members to follow safe working procedures                                      | 1                                 | 2                 | 3  | 4  | 5   |
| 18                           | I monitor new crew members to ensure they are performing safely,                                 | 1                                 | 2                 | 3  | 4  | 5   |
| 19                           | I report crew members who violate safety procedures  | 1                                 | 2                 | 3  | 4  | 5   |
| 20                           | I tell new crew members that violations of safety procedures will not be tolerated               | 1                                 | 2                 | 3  | 4  | 5   |
| 21                           | I attend safety meetings,  | 1                                 | 2                 | 3  | 4  | 5   |
| 22                           | I attend non mandatory safety-oriented meetings,   | 1                                 | 2                 | 3  | 4  | 5   |
| 23                           | I keep informed of changes in safety policies and procedures                                     | 1                                 | 2                 | 3  | 4  | 5   |
| 24                           | I try to improve safety procedures,  | 1                                 | 2                 | 3  | 4  | 5   |
| 25                           | I try to change the way the job is done to make it safer,  | 1                                 | 2                 | 3  | 4  | 5   |
| 26                           | I try to change policies and procedures to make them safer                                       | 1                                 | 2                 | 3  | 4  | 5   |
| 27                           | I make suggestions to improve the safety of a mission  | 1                                 | 2                 | 3  | 4  | 5   |

## SECTION 4

The following are a number of statements that could be used to describe specific factors relating to leadership behaviours. Please read each statement carefully and indicate the extent to which you agree with each statement by ticking the appropriate number on the following scale. Scale anchors consisted of

1- Not at all    2- once in a while    3 - sometimes    4 - fairly often    5 - frequently if not always

| My leader: |  | Not at all | Once in a while | Sometimes | Fairly often | Frequently if not always |
|------------|--|------------|-----------------|-----------|--------------|--------------------------|
| 1.         | Instills pride in me for being associated with him/her                     | 1          | 2               | 3         | 4            | 5                        |
| 2.         | Goes beyond self-interest for the good of the group                        | 1          | 2               | 3         | 4            | 5                        |
| 3.         | Acts in ways that build my respect   | 1          | 2               | 3         | 4            | 5                        |
| 4.         | Displays a sense of power and confidence                                   | 1          | 2               | 3         | 4            | 5                        |
| 5.         | Talks about his/her most important values and beliefs                      | 1          | 2               | 3         | 4            | 5                        |
| 6.         | Specifies the importance of having a strong sense of decisions             | 1          | 2               | 3         | 4            | 5                        |
| 7.         | Emphasizes the importance of having a collective sense of mission          | 1          | 2               | 3         | 4            | 5                        |
| 8.         | Talks optimistically about the future                                      | 1          | 2               | 3         | 4            | 5                        |
| 9.         | Talks enthusiastically about what needs to be accomplished                 | 1          | 2               | 3         | 4            | 5                        |
| 10.        | Expresses a compelling vision of the future                                | 1          | 2               | 3         | 4            | 5                        |
| 11.        | Expresses confidence that goals will be achieved                           | 1          | 2               | 3         | 4            | 5                        |
| 12.        | Re-examines critical assumptions to questions whether they are appropriate | 1          | 2               | 3         | 4            | 5                        |

| My leader |   | Not at all | Once in a while | Sometimes | Fairly often | Frequently if not always |
|-----------|---|------------|-----------------|-----------|--------------|--------------------------|
| 13.       | Seeks differing perspectives when solving problems                                      | 1          | 2               | 3         | 4            | 5                        |
| 14.       | Gets me to look at problems from many different angles                                  | 1          | 2               | 3         | 4            | 5                        |
| 15.       | Suggests new ways of looking at how to complete assignments                             | 1          | 2               | 3         | 4            | 5                        |
| 16.       | Spends time teaching and coaching   | 1          | 2               | 3         | 4            | 5                        |
| 17.       | Treats me as individual rather than just a member of a team                             | 1          | 2               | 3         | 4            | 5                        |
| 18.       | Considers me as having different needs, abilities, and aspirations from others          | 1          | 2               | 3         | 4            | 5                        |
| 19.       | Helps me to develop strengths   | 1          | 2               | 3         | 4            | 5                        |
| 20.       | Provides me with assistance in exchange for my efforts                                  | 1          | 2               | 3         | 4            | 5                        |
| 21.       | Discusses in specific terms who is responsible for achieving performance targets        | 1          | 2               | 3         | 4            | 5                        |
| 22.       | Makes clear what i can expect to receive when performance goals are achieved            | 1          | 2               | 3         | 4            | 5                        |
| 23.       | Expresses satisfaction when I meet expectations   | 1          | 2               | 3         | 4            | 5                        |
| 24.       | Focuses attention on irregularities, mistakes, exceptions and deviations from standards | 1          | 2               | 3         | 4            | 5                        |

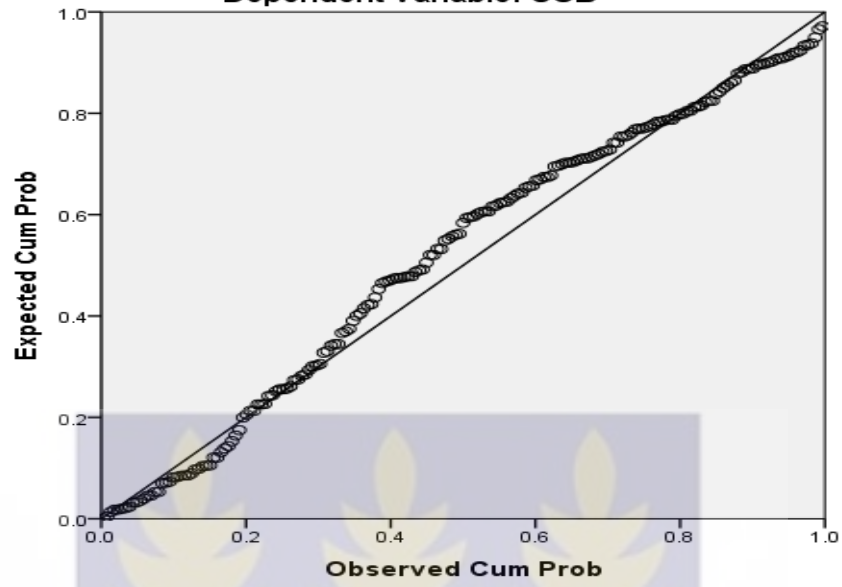
|     |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|
| 25. | Concentrates his/her full attention on dealing with mistakes, complaints, and failure | 1 | 2 | 3 | 4 | 5 |
| 26. | Keeps track of all mistakes   | 1 | 2 | 3 | 4 | 5 |
| 27. | Directs my attention toward failures to meet standards                                | 1 | 2 | 3 | 4 | 5 |
| 28. | Fails to interfere until problems becomes serious                                     | 1 | 2 | 3 | 4 | 5 |
| 29. | Waits for things to go wrong before taking action                                     | 1 | 2 | 3 | 4 | 5 |
| 30. | Shows that he/she is a firm believer in “if it will not break, don’t fix it”          | 1 | 2 | 3 | 4 | 5 |
| 31. | Demonstrates that problems must become chronic before taking action                   | 1 | 2 | 3 | 4 | 5 |



### Appendix B: Assumptions

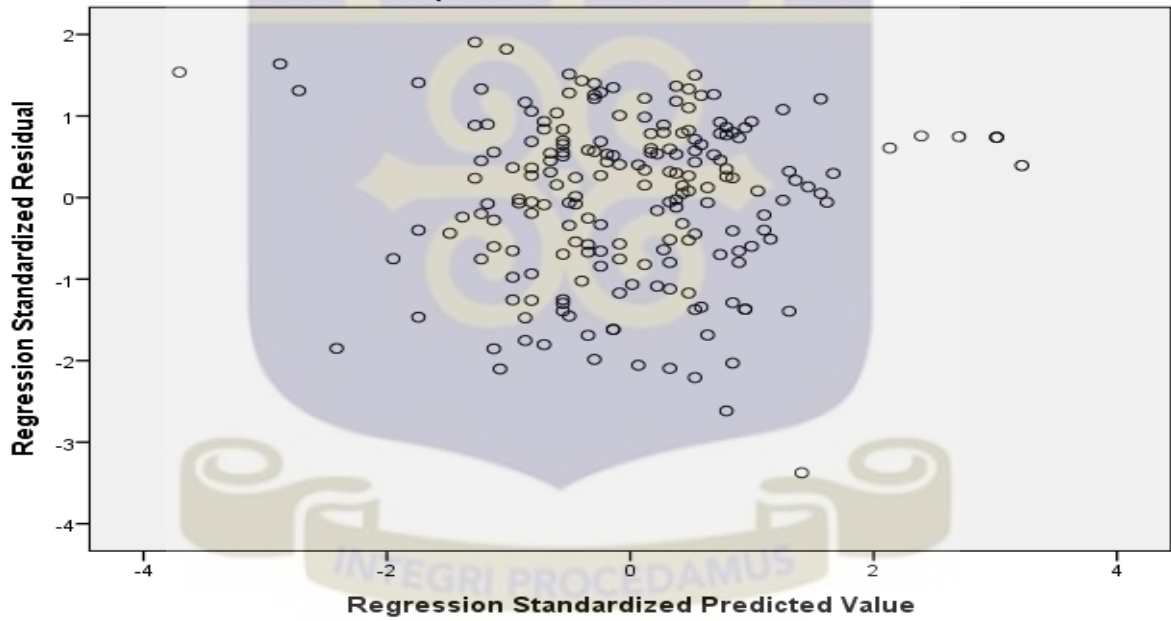
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: SCB

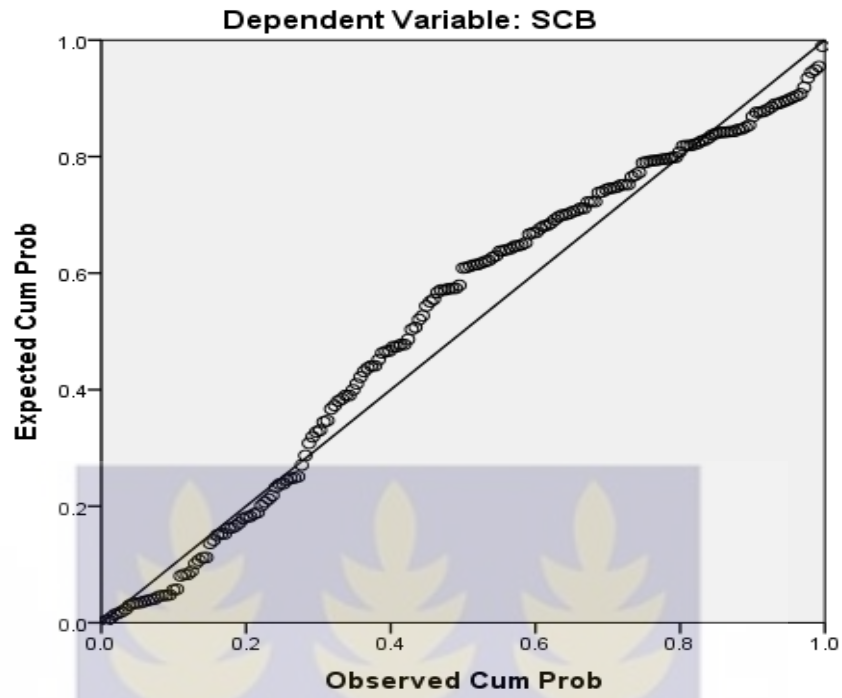


Scatterplot

Dependent Variable: SCB

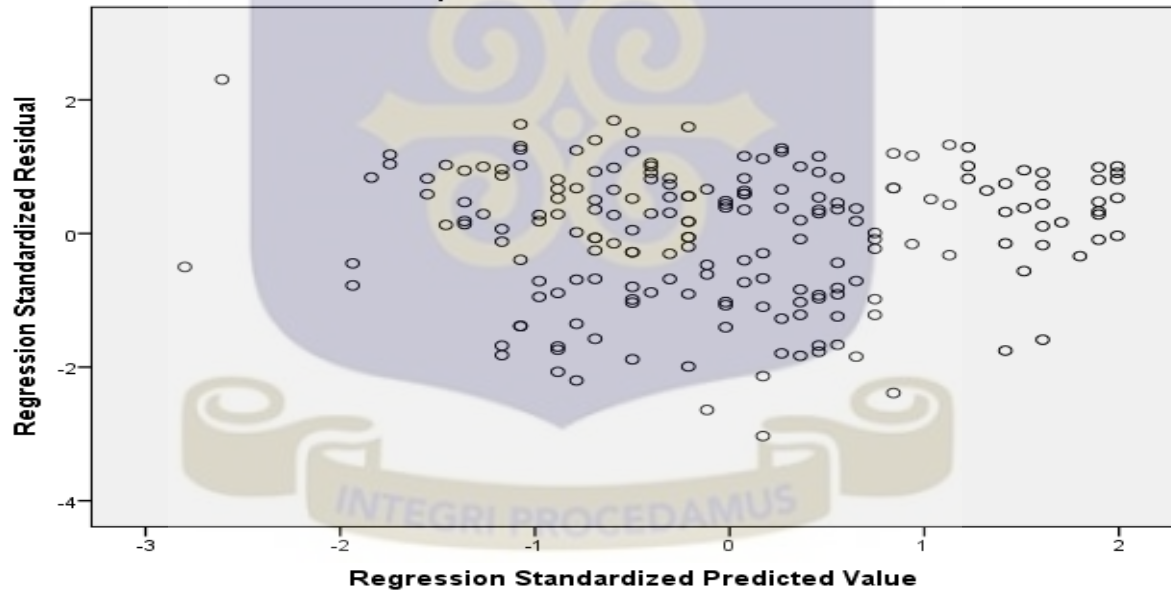


Normal P-P Plot of Regression Standardized Residual



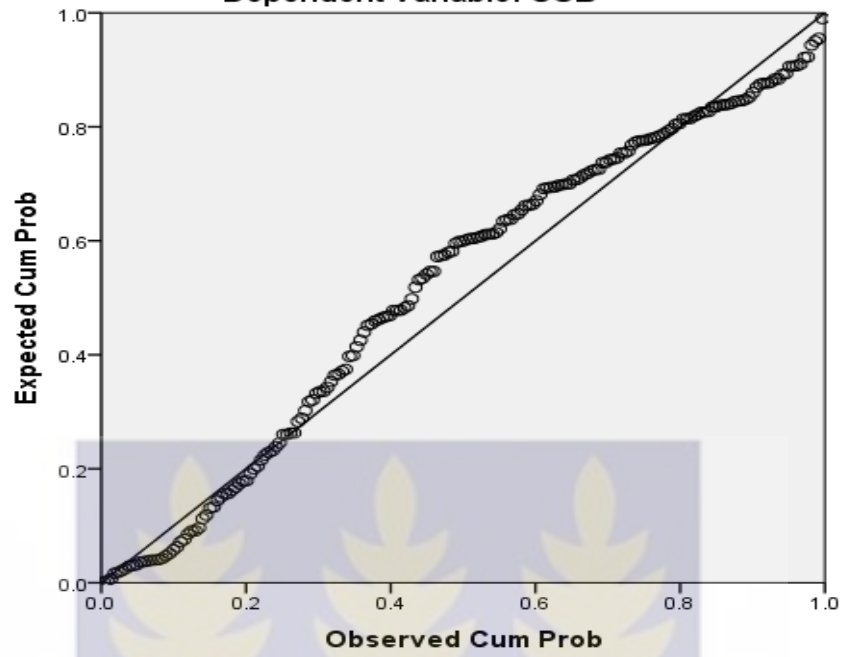
Scatterplot

Dependent Variable: SCB



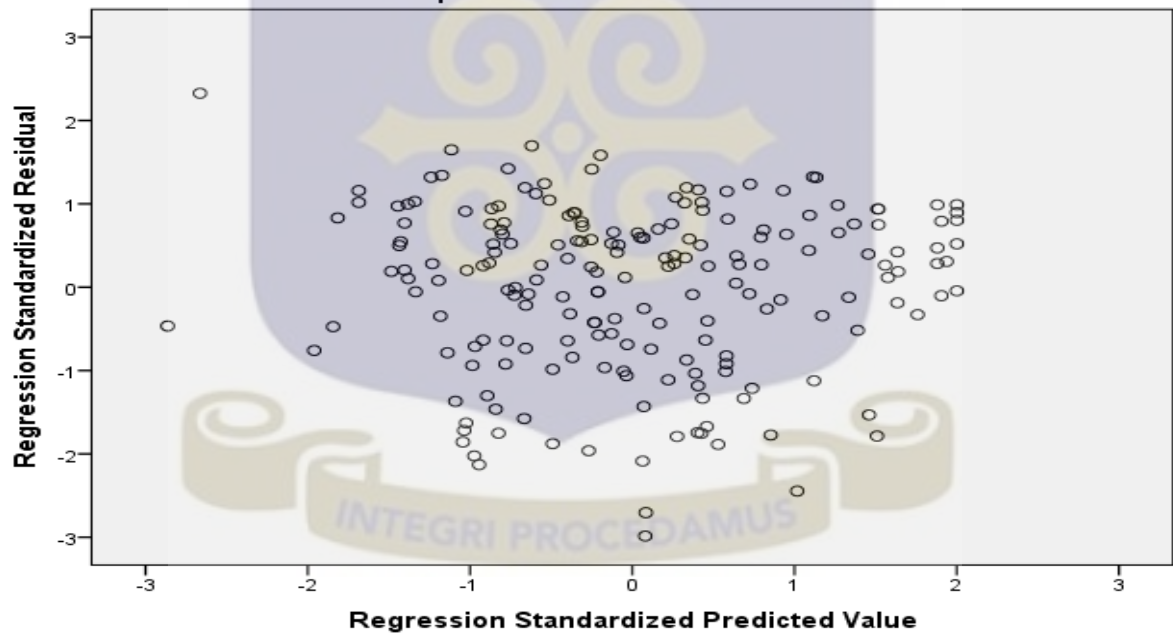
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: SCB

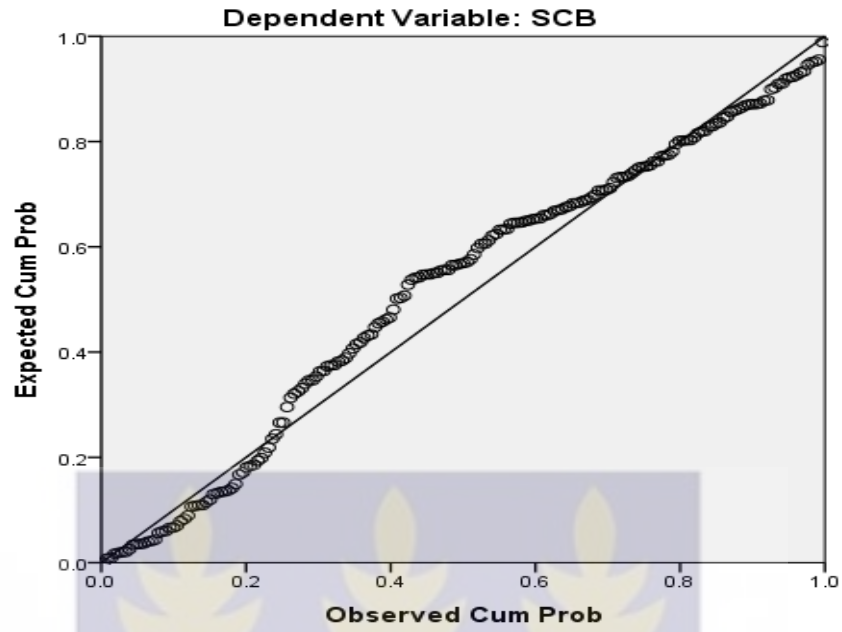


Scatterplot

Dependent Variable: SCB



Normal P-P Plot of Regression Standardized Residual



Scatterplot

Dependent Variable: SCB

