UNIVERSITY OF CAPE COAST



PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN THE

TAKORADI METROPOLIS

MICHELLE BLAY

2019

UNIVERSITY OF CAPE COAST

# EFFECT OF THE BIG FIVE PERSONALITY TRAITS ON JOB PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN THE

TAKORADI METROPOLIS

BY

MICHELLE BLAY

Dissertation submitted to the Department of Management of the School of Business, College of Humanities and Legal Studies, University of Cape Coast in partial fulfillment of the requirements for award of Master of Business Administration degree in General Management.

APRIL 2019

### DECLARATION

### **Candidate's Declaration**

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate Signature ...... Date: .....

Name: Michelle Blay

### **Supervisors' Declaration**

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature ...... Date: ......

Name: Dr. Edward Nii Amar Amarteifio

#### ABSTRACT

The present study sought to analyse the effect of the Big Five personality traits of owner-managers on the job performance of SMEs in the Takoradi Metropolis. Employing the quantitative research methodology and the descriptive research design, 383 small and medium-sized enterprises operating the Sekondi-Takoradi Metropolis were sample from a population of 115,577, using Krejcie and Morgan's (1970) table and the stratified sampling technique. Owner-mangers of those small and medium-sized enterprises were the subjects of the study. A questionnaire was the instrument for data collection. The study found that Extraversion, Conscientiousness and Openness to experience had positive and significant relationship with job performance. Contrariwise, Neuroticism and Agreeableness had negative and significant relationship with job performance. The study concluded that owner-managers who score high on Extraversion, Conscientiousness and Openness to experience are likely to be more successful in their businesses. The researcher recommends that government, donors and businessmen who are interested in developing young entrepreneurs should consider individuals who score high on Extraversion, Conscientiousness and Openness to experience.

iii

# **KEY WORDS**

Job performance

Owner-managers

Personality traits

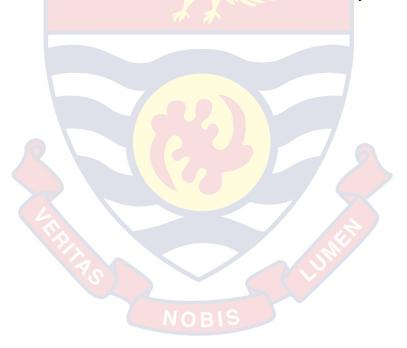
Small and medium-sized enterprises

The Big Five factors



#### ACKNOWLEDGMENTS

I express much gratitude to Dr. Edward Nii Amar Amarteifio, my Supervisor, for his immense assistance, dedication and encouragement, which has seen through the attainment of my academic dream. My gratitude also goes to all the other lecturers in University of Cape Coast, School of Business, who tutored me through this programme with selfless commitment and excellence. Special thanks goes to my dear husband, Mr. Chamuel Nkum for his immense support throughout the entire period. Again, I appreciate the efforts of Mr. Samuel Koomson in this dissertation. I am also thankful to the various authors whose works have been cited in this study.



v

# DEDICATION

To my parents, Mr. and Mrs. Blay



# **TABLE OF CONTENTS**

	Page	
DECLARATION	ii	
ABSTRACT		
KEY WORDS		
ACKNOWLEDGEMENTS		
DEDICATION		
LIST OF TABLES	х	
LIST OF FIGURE	xi	
LIST OF ACRONYMS	xii	
CHAPTER ONE: INTRODUCTION		
Background to the Study		
Statement of the Problem	5	
Purpose of the Study	7	
Research Objectives		
Hypotheses		
Significance of the Study	9	
Delimitations NOBIS	9	
Limitations	9	
Organisation of the Study	9	
CHAPTER TWO: LITERATURE REVIEW		
Introduction	11	
The "Big Five" Personality Theory	11	
The Concept of Job Performance	13	

The "Big Five" Personality Dimensions and Job Performance		
Definition and Classification of SMEs Globally 1		
Definition of SMEs in Ghana	22	
Empirical Review	23	
Conceptual Framework	41	
Chapter Summary	42	
CHAPTER THREE: RESEARCH METHODS		
Introduction	43	
Research Approach	43	
Research Design	44	
Population	44	
Sampling Procedure and Sample Size	45	
Data Collection Instrument	47	
Data Processing and Analysis	48	
Ethical Considerations	48	
Chapter Summary	49	
CHAPTER FOUR: RESULTS AND DISCUSSION		
Introduction	50	
Demographic Characteristics OBIS	50	
Validity and Reliability	52	
Descriptive Statistics	54	
Pearson's Correlation Coefficient	66	
Regression Analysis		
Summary of Findings	74	

# CHAPTER FIVE: SUMMARY, CONCLUSION AND

# RECOMMENDATIONS

Introduction	
Summary of the Study	
Conclusions	77
Recommendations	77
Suggestions for Future Research	
REFERENCES	79
APPENDIX	90
A: Questionnaire for owner-managers in SMEs	90



# LIST OF TABLES

Tables		Page
1	Employment Status of Takoradi Metropolis	45
2	Determining Sample Size of a Known Population	46
3	Proportional Stratified Sampling Method	47
4	Demographic Characteristics	51
5	Computed Reliability Co-efficient for Pre-test Data	54
6	Extraversion	55
7	Conscientiousness	56
8	Openness to Experience	58
9	Neuroticism	60
10	Agreeableness	61
11	Personality traits of owner-managers in SMEs	63
12	Mean Ranking	64
13	Job Performance in SMEs	65
14	Correlation Analysis	68
15	Relationship, Amount of Variation and Autocorrelation Test	70
16	Coefficient and Multicollinearity Test	72

# LIST OF FIGURE

1 Conceptual framework of the study 41

Page



# LIST OF ACRONYMS

BFI	Big-Five Inventory
CWBs	Counterproductive Work Behaviours
FFM	Five Factor Model
GEDC	The Ghana Enterprise Development Commission
GPA	Grade Point Average
GSS	Ghana Statistical Service
LSR	Linear Structural Relationships
MNCs	Multinational Companies
OCB	Organisational Citizenship Behaviour
OCBI	Organisational Citizenship Behaviours Directed Towards
	Individuals
ОСВО	Organisational Citizenship Behaviours Directed Towards
	Organisation
PLS	Partial Least Squares
SMEs /	Small and Medium-size Enterprises
SPSS	Statistical Product for Service Solution
USE	Unified State Examination

#### **CHAPTER ONE**

#### **INTRODUCTION**

Small and Medium-size Enterprises (SMEs) have often been described as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines and they are the largest employer of workers rather than the multinational companies. Though the failure of SMEs have mostly been attributed to factors such as incomplete records keeping, input constraints and others, the management of these enterprises by the owner-managers is also vital. An owner-manager's personal approach to people and tasks in a leadership role impacts how he/she leads, motivates and treats employees and this behavior will either lead to the failure or the success of the business.

The relationship between personality and job performance has been a frequently studied topic in industrial psychology in the past century. Industrial psychologists have questioned the usefulness of personality measures in predicting job performance, because of pessimistic conclusions of early reviews of the topic and concerns that most personality measures are faked. This study reveals the impact of the Big five Personality traits on the job performance of SMEs laying emphasis on the personality traits of owner/-managers and how they affect the job performance of businesses. It also discloses personality traits of owner/-managers operating successful businesses.

### **Background to the Study**

Small and medium-sized enterprises are increasingly recognized as the prime vehicle for economic development in both developed and developing nations. It has been widely recognized that there is a positive

relationship between SMEs and economic growth and so due to this; most countries are focusing on stimulating the economic growth through the development of SMEs (Isaga, 2014). SMEs are recognised and acknowledged worldwide as vital and significant contributors to economic development, job creation, and the general health and welfare of economies, both internationally and nationally (Carsamer, 2009). It is also seen as a major source of employment, revenue generation, innovation and technological advancement. SMEs have become a major asset in the economy (Pushpakumari, 2009).

In most countries in the world, the level of economic dependence on SME's has increased in recent years, therefore most government of countries emphasize more on the importance of SME's and this has led to the development of organization of enterprise assistance programs and policies to develop this sector (Pushpakumari, 2009). However, the effectiveness of these policies and programs are dependent on a thorough understanding of owner/managers and how they operate.

SMEs constitute about 90 percent of total business units in Ghana and account for 60 percent of Ghana's employed labour force (Asamoah, 2014). They are often seen as major contributors to job creation, the seeds of big businesses and the fuel of national economic engines (Ackah & Vuvor, 2011). In as much as SMEs play a vital role in the nation's economy, they are faced with challenges that hinder their growth. One key challenge of SMEs is its management which is mostly done by the owner-managers who are not only to supervise their employees, but also, to have a certain personality to mentor, guide and serve as a role model to them. Due to the general nature of SME's as businesses with flat original hierarchies, the owner-managers tend to make

the majority of long term planning decisions both financial and human resources) of the business (Elbeltagi, Sharji, Hardake & Elsetouhi, 2013).

The personality of owner-managers mostly has an impact on the employees which turn affects their performance and the performance of the organisation at large. According to Elbeltagi et al. (2013), the role of owner-managers is seen to be critical in the development of SMEs and it has also been identified to have a significant impact on managing of SME's. It is viewed that SME owner-managers with a positive attitude towards work, who are innovative, risk takers, entrepreneurial, invariably creative and knowledgeable in their area of work are more likely to excel and establish a better business. These attitudes mostly emerge as a result of the personality of the owner manager (Elbeltagi et al., 2013).

In the findings of Modh, Kamanddin, Muda, Hassan and Yahya (2016), It was concluded that owner managers of SME's need to implore their confidence to work under pressure, make decisions under uncertainty, build courage and self-discipline which are key values to business success. These attributes can however be linked with the personality of the owner-manager. Owner-managers' personalities, particularly their values and goals are indistinguishable from the goals of their businesses.

Personality traits are characteristics originating from within an individual to give the person their individuality (Burger, 2010). Individuals have personality traits that distinguish them from each other. These traits make a person more or less suited for working with customers and employees. Therefore, it is crucial to understand how important different factors are contributing to a person's job performance when managing customer relations

(Seng, Theng, Ling, Siang & Wan, 2013). The Big Five Personality Theory was developed by Goldberg in 1982 and again confirmed in 1990. These five factor model describes the individual's characteristics, patterns of thinking, feeling, behaviour, and how they respond to environmental changes in terms of five dimensions that can explain individuals of different behaviors (Ranwala & Dissanayake, 2016).

These five dimensions are Agreeableness, Conscientiousness, Emotional stability, openness to experience and Extraversion. Firstly, Agreeableness defines the extent to which a person is good nurtured, helpful, trusting and cooperative. Conscientiousness is the extent to which a person is organized, careful, self-disciplined and responsible. Emotional stability refers to the extent to which a person is calm and secure. Openness to experience is the extent to which a person is imaginative, independent, and has a preference or variety. Extraversion refers to the extent to which a person is sociable, talkative, lively, active, and excitable (Zhang & Wei, 2011). The personality traits are important to an individual because they can help to increase the job performance of those who possess them. This will in turn improve the performance of the business (Seng et al., 2013).

People's personalities obviously have an impact on many things they do, if not everything. How profound the effect of personality is on job performance depends of course on the unique facets of an individual's personality (Neubert, 2004). Performance refers to those behaviours that have been evaluated or measured as to their contribution to organisational goals (Cook & Hunsaker, 2001; Katsaros, Tsirikas, & Nicolaidis, 2015). It can also be classified as behaviours and results whereby behaviours emanate from the

performer and transform performer from abstraction to action (Darkwah, 2014).

Job performance is influenced by aptitude, need for achievement, selfregard, locus of control, affective temperament and the interaction between these constructs (Leephaijaroen, 2016). Job performance has a strong link with goal-setting. Goals are performance levels which the management and staffs of SMEs have agreed upon as performance standards. The existence of goals energises both managers and employees and direct their thought and behaviour toward one end (Dobronyi, Oreopoulos, & Petronijevic, 2017; Inyang & Akaegbu, 2014). A number of research works have established a relationship between personality traits and job performance. In this present study, the relationship between personality dimensions and job performance was studied from a trait perspective, and more specifically the "Big Five" personality dimensions as conceptualized by Askarian and Eslami (2013).

## **Statement of the Problem**

A lot has been said and written about SMEs the world over. It has also formed the subject of discussions in so many seminars and workshops both locally and internationally. Most governments have formulated policies aimed at facilitating and empowering the growth, development and performance of SMEs. It is however worrisome that despite the incentives, policies, programmes and support aimed at revamping the SMEs, they have performed rather below expectation in Ghana (Leephaijaroen, 2016). While an average operator would always hinge his failure to lack of access to finance, others think otherwise that inappropriate management skills and lack of entrepreneurial skills and know- how are largely responsible.

Various studies have stressed the importance of owner-managers of SMEs. According to Elbeltagi et al (2013), the role of owner-managers is seen to be critical in the development of SMEs. It is viewed that SME owner-managers who have a positive attitude towards work, are innovative, risk takers, entrepreneurial, creative and knowledgeable in their area of work are more likely to excel and establish a better business. These attitudes mostly emerge as a result of the personality of the owner manager (Elbeltagi et al., 2013).

As stated by Isaga (2014) entrepreneurial experience and level of education with emphasis on the owner-manager are not important in explaining SMEs growth. How an owner-manager makes critical decisions concerning innovative strategies is dependent on his or her personality traits. This is the reason why firms are relying on the knowledge and skills of ownermanagers for influencing the performance of the business in a positive way. The most important role of an owner-manager is to promote the company's products/services.

A number of studies have been conducted on the relationship between personality and job performance. Although several studies have been conducted, it is still uncertain whether personality factor is a major determinant of job performance (Rose, Ramalu, Uli, & Kumar, 2010). Usually, the owner-manager is the one who makes important decisions concerning products, markets, motivation of employees, expansion plans and other strategic decisions concerning the firm. Thus, this leads to the possibility that a large proportion of the difference in performance among SMEs can be explained by the individual entrepreneurs (Isaga, 2014).

Although the relationship between workforce diversity such as personality traits and organisational performance in SMEs have been fairly studied and documented in developed countries, such as USA, France, Germany Russia, etc., the issue has not received adequate attention in the case of SMEs located in the developing world (Darkwah, 2014). It is generally known that there is limited research work on how individual personality traits influence organisational performance. There is clear evidence that personality affects the functioning of organisations in terms of performance; positively or negatively.

While employees are mostly tested on the big five personality traits in collaborative situations to determine what strong personality traits they can add to the group dynamics, the influence of personality traits of owner-managers on the performance of organisations is mostly ignored (Dankwah, 2014). This study sought to analyse the effect that the personality trait of an owner-manager of an SME has on the job performance of that organisation.

### **Purpose of the Study**

In general, the study sought to analyse the effect of the Big Five personality traits of owner-managers on the job performance of SMEs in the Takoradi Metropolis.

#### **Research Objectives**

The study sought to specifically:

- 1. Determine the relationship between agreeableness and job performance.
- 2. Determine the relationship between conscientiousness and job performance.

- 3. Determine the relationship between neuroticism and job performance.
- 4. Determine the relationship between openness to experience and job performance.
- 5. Determine the relationship between extraversion and job performance.

### Hypotheses

- $H_0$  There is no significant relationship between Agreeableness and job performance.
- $H_1$  There is a significant relationship between Agreeableness and job performance.
- H<sub>0</sub> There is no significant relationship between Conscientiousness and job performance
- H<sub>2</sub> There is a significant relationship between Conscientiousness and job performance.
- $H_0$  There is no significant relationship between Neuroticism and job performance.
- H<sub>3</sub> There is a significant relationship between Neuroticism and job performance.
- H<sub>0</sub> There is no significant relationship between Openness to experience and job performance. NOBIS
- H<sub>4</sub> There is a significant relationship between Openness to experience and job performance.
- $H_0$  There is no significant relationship between Extraversion and job performance.

 $H_5$  – There is a significant relationship between Extraversion and job performance.

#### Significance of the Study

The study is relevant for several reasons. First of all, the results of the study will reveal the kinds of personality traits demonstrated by SMEs in the Takoradi Metropolis. Furthermore, the study will unveil the personality traits that have the greatest impact on job performance. Knowing the personality traits that have the greatest impact on job performance will help in policy formulation by NBSSI, Ghana Chamber of Commerce and other regulatory authorities in providing interventions to support individual owner-mangers in the sector.

#### **Delimitations**

The study explored the impact of the Big Five personality traits on the job performance of SMEs in the Takoradi Metropolis. The personality traits of both managers and employees have a great impact on the job performance of SMEs, but this study was restricted to the personality traits of owner-managers of small enterprises in the Takoradi metropolis and how it affected their job performance. The research focused on selected SMEs from various sectors to represent the whole in the Takoradi metropolis.

#### Limitations

The study was limited by time and the difficulty of coming into direct contact with the owner-managers of the various SMEs.

### **Organisation of the Study**

The study was organized into five chapters as follows: Chapter one commenced with introduction which encapsulates the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, delimitation, and the organization of the study.

Chapter two reviewed all available literature, definitions and empirical evidence on the study and captures reports and relevant theories in relation to personality and job performance. Chapter three laid emphasis on the methodology of the study. Here, the target population, the sample size and sampling technique, the research instrument and data collection procedures were outlined with other research techniques necessary for the study. Chapter four presented the data analysis, interpretation, and discussions. Chapter five outlined the summary of findings, conclusions, and appropriate recommendations on the basis of the research findings.



**Digitized by Sam Jonah Library** 

#### **CHAPTER TWO**

#### LITERATURE REVIEW

### Introduction

This chapter covered the theoretical review, conceptual issues, empirical review and conceptual framework. First of all, theoretical review explained the "Big Five" five personality trait theory, the "Big Five" personality dimensions, the concept of job performance, and the definition and classification of SMEs. Then, empirical review documented the results of other studies that were closely related to the effect of the big five personality trait on job performance of SMEs in Takoradi Metropolis, Ghana as well as identifying the gaps, similarities or contradictions in such studies. Finally, the conceptual framework showed the researchers' idea on how the big five personality trait and job performance nexus was explored.

### The "Big Five" Personality Theory

The "Big Five" personality or also known as the Five Factor Model (FFM) is one of the most highly regarded trait theories of personality. The "Big Five" Personality theory suggests that there are five basic personality dimensions that can explain individual differences in behaviour (Seng, Theng, Ling, Siang, & Yean, 2013). The theory suggest that individuals who display high scores on openness to experience, conscientiousness, extraversion, emotional stability, and agreeableness are likely to perform well at their workplaces (Goldberg, 1992). Therefore, it is expected that owner-managers who score high on those five dimensions will be good performance at the workplace.

Many researchers have conceptualized personality from a variety of theoretical perspectives and at various levels of breadth (Khuong, Linh, Toan, & Phuong, 2016; Patki & Abhyankar, 2016; Williams, Grajales, & Kurkiewicz, 2013). The contributions made at each level have been outstanding in aiding the understanding of individual differences in behaviour and experience. Personality assessment was a big challenge due to the array of personality scales that existed from which researchers were to choose from with little guidance and no overall rationale at hand.

Researchers needed to study specific domains of personality characteristics rather than examining separately the thousands of particular attributes that make individuals unique and moreover, a generally accepted taxonomy would greatly facilitate the communication and accumulation of empirical findings by offering a standard vocabulary (Alsuwailem & Elnaga, 2016; Attia, 2013; Ferreira & Nascimento, 2016). According to the researchers, several investigators were involved in the discovery and clarification of the Big Five dimensions. The field is now approaching a consensus after many years of research on a general taxonomy of personality traits, the "Big Five" personality Dimensions

They agree that almost all personality measures could be categorized according to the Big Five personality dimensions (Alsuwailem & Elnaga, 2016; Attia, 2013; Ferreira & Nascimento, 2016). According to Soegoto, Indiyati and Marhaliyyah (2017), the five personality dimensions seem to be relevant to different cultures and have been recovered consistently in factor analyses of peer and self-ratings of trait descriptors involving diverse conditions, samples and factor extraction and rotation methods.

#### The Concept of Job Performance

The term performance has been defined in various ways. Performance refers to those behaviours that have been evaluated or measured as to their contribution to organisational goals (Cook & Hunsaker, 2001 cited in Katsaros, Tsirikas, & Nicolaidis, 2015). In the same light, Gareth (2003) defines business performance as a measure of how efficiently and effectively managers use resources to satisfy customers and achieve organisational goals. However, for the purpose of this study, Gareth definition is adopted.

Job performance is influenced by aptitude, need for achievement, selfregard, locus of control, affective temperament and the interaction between these constructs (Leephaijaroen, 2016). Performance, as stated by Darkwah (2014) can also be classified as behaviours and results whereby behaviours emanate from the performer and transform performer from abstraction to action. According to Darkwah are products of mental and physical efforts applied to tasks and can be judged apart from results. Research has showed that personality dimensions are related to job performance (Alsuwailem & Elnaga, 2016; Attia, 2013; Ghani *et al.*, 2016; Seng *et al.*, 2013; Waheed *et al.*, 2017).

In this present study, the relationship between personality dimensions and job performance is studied from a trait perspective, and more specifically the "Big Five" personality dimensions as conceptualized by Askarian and Eslami (2013). Job performance of SMEs is measured by customer satisfaction, productivity (output), profits, customer grievances, public credibility, sales volume, and customer loyalty (repeat-purchases).

### The "Big Five" Personality Dimensions and Job Performance

Job performance can be affected by situational factors such as the characteristics of the job, the organisation and co-workers (Echchakoui, 2013; Nye, Orel, & Kochergina, 2013), and by dispositional factors which include personality characteristics, needs, attitudes, preferences and motives that result in a tendency to react to situations in a predetermined manner (Leephaijaroen, 2016). Job performance is also influenced by aptitude, need for achievement, self-regard, locus of control, affective temperament and the interaction between these constructs (Ongore, 2013).

Therefore, it is widely agreed that personality variables can be significant predictors of individual performance when carefully matched with the appropriate occupation characteristics and organisation. Among the personality traits that have been frequently shown to be related to job performance of employees is the big five factors of personality namely: extraversion, conscientiousness, openness to experience, neuroticism, and agreeableness (Waheed *et al.*, 2017).

### Extraversion

Extraversion refers to the extent to which a person is sociable, talkative, lively, active, and excitable. They also tend to be talkers and dominate (Ghani, Yunus, & Bahry, 2016). Extraversion can predict effective functioning and well-being across a wide variety of domains (Alsuwailem & Elnaga, 2016). Usually individuals who score high on extraversion tend to be active, introduce discussions and stimulate social interactions. The other side of extravert is introvert. Introvert people tend to be low-key, quiet, deliberate, and less dependent on the social world. The independence and reserve

behaviour of the introvert is sometimes mistaken for arrogance or unfriendliness. Individuals who score low in extraversion tend to be independent and spend much of their time enjoying loneliness (Attia, 2013; Seng *et al.*, 2013; Waheed *et al.*, 2017).

Extraversion has been found to have a significant effect job engagement (Ongore, 2013), organisational citizenship behaviour (Leephaijaroen, 2016; Patki & Abhyankar, 2016), job performance of individuals (Abdullah, 2013; Alsuwailem & Elnaga, 2016; Echchakoui, 2013; Ghani *et al.*, 2016; Soegoto, Indiyati, & Marhaliyyah, 2017), academic performance of students (Nye *et al.*, 2013), counterproductive work behaviours (CWB) (Ferreira & Nascimento, 2016), sales performance (Waheed *et al.*, 2017), and productivity (Alsuwailem & Elnaga, 2016). Hence, it can be hypothesised that:

H<sub>1</sub>: There is significant relationship between Extraversion and job performance

### Conscientiousness

It is the degree to which a person shows responsibility, achievement orientation, dependability and perseverance. Individuals who score high in conscientiousness are hardworking and self-disciplined. Again, they have the tendency to receive specific feedback on performance and reduce uncertainty. People who score high on conscientiousness have good self-control, act dutifully, always aim for achievement, follow a plan rather than acting spontaneously and this makes them good at formulating long-term goals, organising and planning routes towards achievement and work persistently to achieve goals (Ghani *et al.*, 2016; Seng *et al.*, 2013; Waheed *et al.*, 2017).

Nonetheless, high level of conscientiousness may not always be good as conscientiousness could be detrimental to well-being when failure is experienced. Although conscientiousness has emerged as the most robust of the five factors to predict job performance (Seng, 2013), a primary distinction has been made between task performance, which is performance of the basic functions and duties as required in the job description, and contextual performance, which consists of extra role and pro-social behaviours that go above the basic job (Alsuwailem & Elnaga, 2016; Attia, 2013; Waheed *et al.*, 2017).

Conscientiousness has been found to have a significant effect on job engagement (Ongore (2013), organisational citizenship behaviour (Leephaijaroen, 2016; Patki & Abhyankar, 2016), job performance of individuals (Abdullah, 2013; Alsuwailem & Elnaga, 2016; Askarian & Eslami, 2013; Echchakoui, 2013; Ghani *et al.*, 2016; Khuong *et al.*, 2016; Soegoto *et al.*, 2017), counterproductive work behaviours (Ferreira & Nascimento, 2016), academic performance (Attia, 2013), sales performance (Waheed *et al.*, 2017), and productivity (Alsuwailem & Elnaga, 2016). However, some studies were notable for the relative unimportance of conscientiousness for success in their sample (Nye *et al.*, 2013). Nevertheless, in this model, it is hypothesised that: H<sub>2</sub>: There is significant relationship between Conscientiousness and job performance.

### **Openness to experience**

Openness to experience refers to the dimension of cognitive style that distinguishes imaginative, creative, and conventional people. Openness to experience refers to the degree to which someone is creative, thoughtful, open

to new experience and curious. It is also a measure of depth, breadth and variability in a person's imaginations and urge for experiences. Individuals who are high in openness reveal tolerance for ambiguity and seek out excitement and risks while individuals who are low in openness choose the familiar in order to avoid risk. Measures of openness to experience may help pinpoint individuals who are "training ready", which means people who are willing to learn (Alsuwailem & Elnaga, 2016; Attia, 2013; Ghani *et al.*, 2016; Seng *et al.*, 2013; Waheed *et al.*, 2017).

Openness to experience has been found to have a significant effect on job engagement (Ongore, 2013), organisational citizenship behaviour (Leephaijaroen, 2016; Patki & Abhyankar, 2016), job performance of individuals (Abdullah, 2013; Askarian & Eslami, 2013; Echchakoui, 2013; Ghani *et al.*, 2016; Khuong *et al.*, 2016; Soegoto *et al.*, 2017), sales performance (Waheed *et al.*, 2017), academic performance (Nye *et al.*, 2013), and counterproductive work behaviours (Ferreira & Nascimento, 2016). Therefore, it can be hypothesised that:

H<sub>3</sub>: There is significant relationship between Openness to experience and job performance.

#### Neuroticism

# NOBIS

This has to do with the individual's ability to adjust to emotional stability. It deals with one's tendency to experience a variety of disruptive emotions and thoughts. People who are high in neuroticism are anxious, insecure, and are more susceptible to stress than their low-neurotic counterparts while people who score low in neuroticism can be characterized as self-confident, calm, even tempered and relaxed. A stable emotion and

conscientious actions are more effective in task situations than interpersonal situations. People with low level of emotional stability or high level of neuroticism have poor stress coping, irrational thinking, poor impulse control and worry (Alsuwailem & Elnaga, 2016; Attia, 2013; Ferreira & Nascimento, 2016; Ghani *et al.*, 2016; Seng *et al.*, 2013; Waheed *et al.*, 2017).

Neuroticism (or emotional stability) has been found to have a significant effect on organisational citizenship behaviour (Leephaijaroen, 2016), job performance of individuals (Askarian & Eslami, 2013; Echchakoui, 2013; Khuong *et al.*, 2016), sales performance (Waheed *et al.*, 2017), academic performance (Nye *et al.*, 2013), and counterproductive work behaviours (Ferreira & Nascimento, 2016). Others researchers have found that neuroticism was negatively related to physical, emotional and cognitive engagement during roles performance (Ongore (2013), job performance of individuals (Abdullah, 2013; Alsuwailem & Elnaga, 2016; Ghani *et al.*, 2016), academic performance (Attia, 2013), and leadership capabilities (Alsuwailem & Elnaga, 2016). In spite of that, it is hypothesised that:

H<sub>4</sub>: There is significant relationship between Neuroticism and job performance.

#### Agreeableness

# NOBIS

This is the degree to which someone shows trust, personal warmth and cooperation. Individuals who are high in agreeableness are easy to get along with as they represent the tendency to be cooperative, kind, modest, flexible, forgiving, courteous, and are attentive to others. They have a positive view of human nature and believe that people are decent, honest, and trustworthy. They get along well with others because for them, social harmony is

important. Conversely, high level of agreeableness is not that useful when it comes to situations that require absolute or tough objective decisions (Alsuwailem & Elnaga, 2016; Attia, 2013; Ferreira & Nascimento, 2016; Ghani *et al.*, 2016; Seng *et al.*, 2013).

Agreeableness has been found to have a significant effect on job engagement (Ongore, 2013), organisational citizenship behaviour (Leephaijaroen, 2016; Patki & Abhyankar, 2016), job performance of individuals (Abdullah, 2013; Askarian & Eslami, 2013; Echchakoui, 2013; Ghani *et al.*, 2016), academic performance (Nye *et al.*, 2013), sales performance (Waheed *et al.*, 2017), and counterproductive work behaviours (Ferreira & Nascimento, 2016). Others studies have found that agreeableness is negatively correlated to leadership capabilities (Alsuwailem & Elnaga, 2016). Irrespective of that, in this model, it is hypothesised that:

H<sub>5</sub>: There is significant relationship between Agreeableness and job performance.

#### **Definition and Classification of SMEs Globally**

Definitions of SMEs vary from country to country, depending on one or more thresholds laid down in respect of investment, employment and turnover. The issue of what constitutes a small or micro enterprise is a major concern in literature. Different writers have usually given different definitions to this category of business. SMEs have indeed not been spared with the definition problem that is usually associated with concepts which have many components. The definition of firms by size varies among researchers as well as writers. Others define SMEs in terms of their legal status and method of

production. Some attempt to use the capital assets while others use labour and turnover level.

Bolton Report (1991) cited in Amero (2017) first formulated an "economic" and "statistical" definition of a small firm. Under the "economic" definition, a firm is said to be small if it meets the following three criteria: it has a relatively small share of their market place; it is managed by owners or part owners in a personalized way, and not through the medium of a formalized management structure; and it is independent, in the sense of not forming part of a large enterprise. Under the "statistical" definition, the Committee proposed the following criteria: the size of the small firm sector and its contribution to gross domestic product (GDP), employment and exports; the extent to which the small firm sector's economic contribution has changed over time; and applying the statistical definition in a cross-country comparison of the small firm's economic contribution.

The Bolton Committee applied different definitions of the small firm to different sectors. Whereas firms in manufacturing, construction and mining were defined in terms of number of employees (in which case, 200 or less qualified the firm to be a small firm), those in the retail, services, and wholesale were defined in terms of monetary turnover (in which case the range is 50,000-200,000 British Pounds to be classified as small firm). Firms in the road transport industry are classified as small if they have five or fewer vehicles. There have been criticisms of the Bolton definitions. These centre mainly on the apparent inconsistencies between defining characteristics based on number of employees and those based on managerial approach (Bolton Report, 1991 cited in Amero (2017).

In Japan, small-scale industry is defined according to the type of industry, paid-up capital and number of paid employees. Consequently, small and medium-scale enterprises are defined as: those in manufacturing with 100 million yen paid-up capital and 300 employees, those in wholesale trade with 30 million yen paid-up capital and 100 employees, and those in the retail and service trades with 10 million yen paid-up capital and 50 employees (Ekpenyong & Nyong, 1992 cited Oppong, Owiredu, & Churchill, 2014).

European Union (EU) Member States, traditionally have their own definition of what constitutes an SME, for example the traditional definition in Germany had a limit of 250 employees, while, for example, in Belgium it could have been 100. But now the European Union (EU) has started to standardize the concept. Its current definition categorizes companies with fewer than 10 employees as "micro", those with fewer than 50 employees as "small", and those with fewer than 250 as "medium". By contrast, in the United States, when small business is defined by the number of employees, it often refers to those with fewer than 100 employees. Canada also defines a small business as one that has fewer than 100 employees (if the business is a goods-producing business) or fewer than 50 employees (if the business is a service-based business), and a medium-sized business as fewer than 500 (Anokyewaa, 2016).

Small-scale industries are defined as manufacturing units employing not more than 30 persons. For the purpose of differentiating them from the other small-scale non-farm economic activities, the emphasis is placed on the manufacturing aspect. Manufacturing means producing or making physical

items. This means that pure service activities such as government services, retail trade, banking, recreation and insurance services are not included. However, repair services are included in the manufacturing enterprises because they have something to do with formally manufactured goods. The argument is that manufacturers do not always produce a finished good but only perform one stage in a sequence of a process The fact that an item can be repaired implies that there is a further stage in the manufacturing process (Kanbontaa, 2016). After looking at the definitions and classifications of SMEs in the global perspective, it is proper to examine definitions of SMEs given in the context of Ghana since the study covers that jurisdiction.

# **Definition of SMEs in Ghana**

In Ghana, various definitions have been given for SMEs but the most commonly used criterion is the number of employees of the enterprise (Ocloo, Akaba, & Worwui-Brown, 2014).). By using this definition, confusion often arises in respect of the unpredictability and cut off points used by the various official sources. According to the National Board for Small Scale Industries (NBSSI) (1998) cited in Nkpaah (2016), a small business is any business that employs up to 29 people, and small business is divided into: the micro, small and medium enterprises. **NOBIS** 

The micro enterprises employ up to five employees with fixed assets (excluding land and building) not exceeding the value of \$10,000; small enterprises are those employing between six and twenty-nine employees or having fixed assets excluding land and building not exceeding \$100,000 and; a medium enterprises employ between 30 and 99 employees with fixed assets of up to \$1m.

According to Mensah (2004) cited in Asamoah (2014), SMEs are dominated by one person, with the owner/manager taking all major decisions. The entrepreneur may possess limited formal education, access to and use of new technology, market information, and access to credit from the banking sector is severely limited; they have weak management skills, thus inhibiting the development of a strategic plan for sustainable growth; they experience extreme working capital volatility; and lack of technical know-how and inability to acquire skills and modern technology impede growth opportunities.

The Ghana Enterprise Development Commission (GEDC), on the other hand, uses a 10 million Ghanaian cedis upper limit definition for plant and machinery. It is important to caution that the process of valuing fixed assets poses a problem. Secondly, the continuous depreciation of the local currency as against major trading currencies often makes such definitions outdated (Abor & Quartey, 2010 cited in Ocloo *et al.*, 2014). In defining SMEs enterprises in Ghana, some researchers used an employment cut-off point of 30 employees and however, classified small-scale enterprises into three categories. These are: micro-employing less than 6 people; very small - employing 6-9 people; and small - between 10 and 29 employees (Asare, 2014; Yeboah, 2014).

### **Empirical Review**

As already mentioned, the empirical review documents the results of other studies that are closely related to the effect of the big five personality trait on job performance of SMEs in Takoradi Metropolis, Ghana as well as identifying the gaps, similarities or contradictions in such studies.

First of all, Echchakoui (2013) investigated the mediating role of adaptive behaviour between Five-Factor traits and employee performance with customers. The respondents were drawn from an important call centre in New Brunswick, Canada. This call centre addresses the principal Canadian internet and telephony organisations. A cover letter and questionnaire were sent to 200 employees; however, completed questionnaires were received from 108 employees. The questionnaire was developed by integrating questions used in previous researches.

The scale for performance with customers comprised five items developed by Hunter and Perreault (2006). The Five-Factor traits (Conscientiousness, Agreeableness, Extraversion, Emotional Stability and Openness to Experience) were measured using 16 items used by Sawyerr, Srinivas and Wang (2009) and developed by Goldberg (1999). Finally, adaptive behaviour was determined based upon the four items used by Hunter and Perreault (2006) and developed by Spiro and Weitz (1990). Echchakoui (2013) adopted the method of structural equations as an analysis strategy, as recommended by Roussel, Durrieu, Campoy and El-Akremi (2002) for numerous assumed relations between variables.

Results showed that Conscientiousness, Agreeableness, Extraversion, Emotional, Stability and Openness to Experience are significantly positively related to performance with customers. Further analysis revealed that, Agreeableness is the biggest predictor of performance with customers, followed by Openness to experience, Conscientiousness, Emotional stability and Extraversion, respectively. To add, Conscientiousness, Agreeableness and Emotional stability positively affected adaptive behaviour in call centres.

However, contrary to the researcher's predictions, there was no significant association between Extraversion and Openness to experience and adaptive behaviour (Echchakoui, 2013).

Despite the contributions made to literature, the study has been limited to call centre and telephony organisations, hence, its findings could not be extended to cover other categories of organisations for example, trading, manufacturing, catering, amongst others. To buttress, the respondents were drawn from an important call centre in New Brunswick, Canada, indicating that the call centre could be a large firm. Therefore, the study is flawed by the fact that, it disregarded small firms. In Turkey, Ongore (2013) sought to determine the relationship between personality traits and job engagement of the university personnel. A self-administered survey was applied to Kastamonu University academic and administrative personnel. A relevant data was collected from 118 personnel.

The study employed the bivariate correlation as well as regression analysis of Statistical Product for Service Solution (SPSS) to test hypothesis. The results of the study indicated that there were significant relationships between personality traits and job engagement. Extraversion, Agreeableness, Conscientiousness and Openness to Experience were positively related but Neuroticism was negatively related to physical, emotional and cognitive engagement during roles performance. Openness to Experience was a significant predictor of physical, emotional and cognitive engagement. Agreeableness was as predictor of emotional and cognitive engagement. Openness to Experience and Agreeableness were the only significant predictors of job engagement. Results of the study suggested that the five

factor model is useful for examining the dispositional source of job engagement (Ongore, 2013).

Despite the contributions made by Ongore (2013) to the body of knowledge, the study only make contributions to the education sector especially at the University level, neglecting other important sector of any economy, for instance, construction, engineering, trading among others. In another study, Leephaijaroen (2016) examined the effects of the big-five personality traits and organisational commitments on organisational citizenship behaviour (OCB). The research method of this study was a mixed method combining quantitative and qualitative methods.

For the quantitative research method, data were collected from 144 support staff at Ubon Ratchathani Rajabhat University, Thailand and the hypotheses were tested using the stepwise multiple regression analysis technique. For the qualitative research method, in-depth interviews with 11 support staff were used to explain the quantitative findings. The findings revealed that the components of the big-five personality traits and organisational commitments which significantly affected OCB were agreeable personality, continuance commitment, conscientious personality, affective commitment, and emotionally-stable personality (Leephaijaroen, 2016).

In examining intensively each dimension of the OCB as a dependent variable, the results showed the following: 1) agreeable personality, affective commitment, conscientious personality, and normative commitment had positive significant effects on altruistic behaviour; 2) conscientious personality, agreeable personality, and continuance commitment had positive significant effects on conscientious behaviour; 3) affective commitment and

agreeable personality had positive significant effects on sportsmanship behaviour; 4) emotionally stable personality and continuance commitment had positive significant effects on courteous behaviour; and 5) continuance commitment, agreeable personality, conscientious personality, and emotionally-stable personality had positive significant effects on civic virtue behaviour (Leephaijaroen, 2016).

In like manner in the study of Ongore (2013), Leephaijaroen's (2016) study has been limited to universities. Stated differently, the study makes contribution to the educational sector, especially at the university level, hence the findings cannot apply to organisations in other sectors of the economy. To add, the study neglected to consider the relationship between the big-five personality trait and job performance. In a similar study conducted in India, Patki and Abhyankar (2016) investigated the Big Five personality factors as predictors of citizenship behaviours directed towards individuals (OCBI) and towards the organisation (OCBO).

The Big Five Inventory by John et al. (1990) and Organisational Citizenship Behaviour Scale by Lee and Allen (2002) were used and the sample comprised of 325 clerical employees, from nationalized and cooperative banks in Maharashtra. The data collected from the 325 questionnaires was tested for adherence to assumptions of sample size adequacy, linearity, collinearity, and independence of errors (Garson, 2012; Williams, Grajales, & Kurkiewicz, 2013). Pearson's Product-moment correlation and regression analyses were performed using SPSS version 22. Path analysis testing mediation was performed using Smart PLS version 3.2.1

(Ringle, Wende, & Becker, 2015) and then Sobel test was performed using Soper's (2010) online statistical calculator (Patki & Abhyankar, 2016).

Findings revealed that conscientiousness, agreeableness, openness to experience and extraversion are positively correlated with both OCBI and OCBO. Further analysis revealed that, openness emerged as the strongest predictor of both OCBI and OCBO, followed by extraversion. Moreover, openness fully mediated the relationship between agreeableness and OCBI, whereas extraversion partially mediated the relationship between agreeableness and OCBI. Openness and extraversion also partially mediated the relationship between conscientiousness and OCBO (Patki & Abhyankar, 2016).

Though the study made good contributions to literature, the study is flawed by for several reasons. Considering the total number of bank clerical employees in India, the sample for the present study (n=325), though sufficient as per the various rules of thumb, is very small. To be in a position to generalise the findings of the study on a pan-India basis with a significant amount of confidence, a larger sample from other states too must be studied. Secondly, the data collected emerges from self-report inventories, and thus the honesty of the responses given in terms of indulgence in citizenship acts may be questioned.

Moreover, the study had been limited to employees in the banking sector hence employees in other equally important sector were disregarded. Finally, the results of the study were generated from a non-probability sample (convenience sampling) hence, members of the population were not given equal and independence chance of being selected. In Russia, Nye, Orel and

Kochergina (2013) studied the Big-Five personality traits and their associated with academic performance among a sample of Russian university students using results from the Unified State Examination (for university admissions) and their current grade point averages as measures of academic performance. Their survey sample is based on 176 (106 males and 70 females) second and third year students (age 18 - 21) of economics and Information Technology departments of the Nizhny Novgorod branch of the National Research University – Higher School of Economics.

In measuring the personality traits, Nye *et al.* (2013) used the Russian ipsative version of a standard Big Five questionnaire. The five Russian scales exactly represent the classic Big Five factors. The Russian ipsative Big Five test proved to be valid and reliable. Cronbach Alpha's coefficients for scales were: Extraversion – 0.61, Agreeableness – 0.56, Consciousness – 0.60, Neuroticism – 0.58, Openness to experience – 0.62. This level of reliability was received on a large sample of adult Russians and it was quite satisfactory for the ipsative tests (Bartram, 1996).

For the purposes of testing the hypothesis of the study, Nye *et al.* (2013) adopted correlation and stepwise regression analysis. In stepwise Regression, the researcher used students' grade point average (GPA) and Unified State Examination (USE) results as dependent variables and gender (on the first step) and Big Five scores on the surveys (on the second step) as independent variables (Nye et al., 2013). They found that Introversion, Agreeableness, Neuroticism, and Openness to experience have observable ties to academic performance. Those results partially confirm existing international studies, but their findings were notable for the relative

unimportance of conscientiousness for success in their Russian sample. Hence, they suggested that cross-cultural differences in educational environment may explain why this trait seems less obviously important in their analysis (Nye et al., 2013).

Once again, irrespective of the contributions that the study has made to knowledge, it has been limited to the educational sector, particularly the university level. Consequently, the findings may not hold for other equally important sectors in the economy. Moreover, the study is flawed by its Cronbach Alpha's coefficients. This is because, according to Pallant (2007), Cronbach Alpha coefficient of 0.70 and above is reliable and recommended. In Pakistan, Abdullah, Rashid and Omar (2013) investigated the effect of personality on job performance of employees, using evidence from banking sector of Pakistan so that through their personality analysis best performing workforce could be hired for the banking sector of Pakistan.

The target population of the study consisted of banking sector employees of Pakistan. Questionnaires were distributed among 700 employees of 10 cities of Punjab and Sindh Province of Pakistan because 84% of the bank branches were in those provinces. A total of 384 accurate and completed questionnaires were retrieved and multi-stage sampling method were utilised for data collection. In the first stage, banks were divided into four different strata according to their nature of products and these strata are Public Banks, Private Banks, Islamic Banks and Foreign Banks.

Then, employees were chosen randomly from the bank branches of different strata. As far as the designing of the questionnaire is concerned, personality was measured through Big-Five Inventory (BF1)-44 scale of John,

Danahue and Kentle (1990); John, Naumann and Soto (2008). The first category of job performance, which was, task performance, is measured by the scale defined by Motowidlo and Van Scotter (1994) and contextual performance is measured through scale of contextual performance given by given by Borman and Motowidlo (1993). Reliability and validity of the instrument was ensured through Cronbach Alpha Test and Conformability Factor Analysis factor analysis using AMOS 20 version (Abdullah, 2013).

Results of the research confirmed the hypothesis that, personality is a good predictor of performance. Extraversion, Conscientiousness, Agreeableness and Openness to Experience has positive and significant effect on Job Performance of employees while neuroticism has negative effect on task and contextual performance of Employees (Abdullah, 2013). However, the study has been limited to the banking sector making its contribution to be skewed only to that sector, at the expense of other equally important sectors of an economy.

In Indonesia, Soegoto, Indiyati and Marhaliyyah (2017) tested and analysed the effect of "the big five personality model" personality on employee's performance at flight manufacturing, using a verification-causal relationship research. The population were taken from the employees of aviation, in which the respondents were employees of the flight machine manufacturing department as much as 190 people. For the purposes of data collection, the study adopted interviews, observation and questionnaires that are already valid and reliable. Path analysis was used for data analysis.

The results of the study showed that, there is significant effect of personality (extraversion, conscientiousness, and openness to experience) on

employee's performance in Indonesia flight manufacture either simultaneously or partially. It must be said that conscientiousness had a dominant effect on employee's performance. This is in accordance with the type of machining department job that requires caution to be able to complete any job that becomes their responsibility. Consequently, employees of Machining Department PT. Dirgantara Indonesia must always be focused and be careful of any task assigned to them. Maximum prudence will reduce mistakes made by employees. This will make their performance be in accordance with acceptable standards and may make good and significant contributions to the company (Soegoto *et al.*, 2017).

In spite of the contributions that the researchers have made to current literature, their study is deemed to be flawed for several reasons. First of all, the study administered questionnaires on 30 respondents, out of the total target population of 190 employees. My argument is that, the 30 respondents chosen were not large enough hence may not provide inaccurate and unreliable results. Rather, Soegoto *et al.* (2017) should have used the census method to choose of all the 190 employees as sample size for the study due to the small size of the population (Amarantunga & Baldry, 2002). Further, the study has been limited to flight machine manufacturing hence the findings may not apply to other crucial sector of the economy, for instance, education sector, oil and gas among others.

In Iran, Askarian and Eslami (2013) looked at the relationship between personality trait and job performance, using employees of the ministry of education of Kerman as case study. The purpose of their study was to examine the relationship between personality traits and job performance in the

education department of Kerman province, and to perform an extensive theoretical study of personality and job performance. This study presented an analytical model based on these studies and expert opinion was formed. The analytical model was based on the five personality dimensions of extraversion, neuroticism (emotional instability), openness to experience, conscientiousness, and agreeableness. The population of the study constituted all 330 employees of the ministry of education of Kerman.

Based on Cochran, Mosteller and Tukey's (1954) formula of sampling, the sample determined composed of 178 individuals. The required data is gathered from a questionnaire. The personality traits are measured by the questionnaire developed by McCrae and Coasta (1999) and the job performance is measured by Paterson, West, Lawthoma and Nickell's (1997) questionnaire of job performance. The data was collected using a questionnaire and analysed by SPSS software using descriptive and inferential statistics at two levels. Results showed that there was a significant relationship between job performance and personality traits, hence, personality traits are important components of job performance (Askarian & Eslami, 2013).

Further, it came to light that, conscientiousness had the highest influence on the job performance of the employees of ministry of education of Kerman. Based on the significant relationship between personality traits and job performance, the managers should seek for the ways by which the individuals are employed according to their personality traits and job position, the reason being that, the efficiency and effectiveness of the organisations will significantly improve by considering the mental and personality characteristics of the individuals (Askarian & Eslami, 2013).

Despite the contributions made by Askarian and Eslami (2013) to the body of knowledge, their study has been limited to the employees in the education sector rendering the findings applicable only to that sector. More so, the use of a sample size of 178 out of a total population of 330 for a quantitative study is questionable. Rather, the researchers should have used the census method to select all the members of the population to serve as sample size for the study, because, quantitative studies require a larger sample size, like 330 employees (Amarantunga & Baldry, 2002).

In Vietman, Khuong, Linh, Toan and Phuong (2016) investigated the effects of five personality traits and communication skill on job performance of employees in multinational companies. Quantitative approach was applied with structured questionnaires directly delivered to 300 staffs of multinational companies (MNCs) in Ho Chi Minh City, Vietnam. Using a simple linear regression, the study found that openness, neuroticism, conscientiousness, and communication skill directly affected employee job performance while agreeableness, extraversion, neuroticism, and conscientiousness indirectly affected job performance through the mediation of communication skill.

The study therefore recommended that, recruiters should employ candidates that tend to be serious about the job that they are applying, goaldriven, thoughtful (conscientiousness trait) as well as those who are eager to learn new things, willing to be trained for the new job, open to different ideas and cultures (openness to experience trait) while avoiding employees that show negative emotions such as anxious, depressed or worried and unhappy mood (neuroticism trait). Moreover, conscientiousness is the most important criteria in choosing staffs among five personality factors due to its strong

impact on job performance (Khuong *et al.*, 2016). However, the study is flawed by the fact that, it has been limited to large firms composed of multinational companies. In other words, the researcher neglected to consider small and medium enterprises.

In another study in Brazil, Ferreira and Nascimento (2016) investigated the relationship between personality traits based on the five-factor model with counterproductive work behaviours (CWB). Study participants were 381 workers from different socioeconomic and educational levels in public and private organisations, from two Brazilian regions. Pearson's correlation and linear regression analysis indicated that, Agreeableness, conscientiousness and neuroticism factors had statistically significant associations with three CWB dimensions. Linear regression analysis revealed all five personality traits contributed to prediction of CWB dimensions.

In spite of the contributions made by the researcher to industry, commerce and services as well as the education sectors, the study is weakened for several reasons. First of all, the five personality dimensions were measured on a five-point Likert scale, after which Pearson's correlation analysis and regression analysis was performed. However, a seven point Likert scale is recommended especially when using continuous data to process the relationships among variables of interest, that is, correlation and regression analysis (Adam, 2015; Grace-Martin, 2008). Further to that, the results of the study were generated from a non-probability sample; hence, members of the population were not given equal and independence chance of being selected.

In Canada, Attia (2013) used the "Big Five" model as a framework for measuring personality and focused on the three most powerful and influential

factors (conscientiousness, extraversion, and emotional stability) that have been shown in previous studies to be most consistently correlated with global individuals performance (whether academic or job performance). The purpose of the study was to investigate whether there is a relationship between these super factors of personality and an individual's performance, in order to identify which personality trait(s) can play a role and to what extent they can predict in individuals' performance.

Academic performance has been assessed in the study as an example of global individual performance with the purpose of studying the possibility of predicting global individual performance including academic or job performance by personality traits. This is because personality traits which can predict and lead to academic success and achievement can also predict somewhat high job performance and success (Attia, 2013). Attia (2013) assessed the academic performance through exam grades of two groups of 209 undergraduate students from two different academic courses: Marketing and Accounting in the Department of Administration Sciences at the University of Quebec at Chicoutimi.

As well, the researcher evaluated personality factors through a homequestionnaire of 37 questions based on Big Five factors and some other personality traits not included in the five factor model (FFM) of personality such as locus of control, self-esteem and life and job (academic) satisfaction. The researcher had addressed the questionnaire to the participants of each course in the beginning of the academic year and then, he took several written examinations at the end of their academic year. The researcher designed each item of the questionnaire to evaluate a particular factor of personality and each

factor of personality was evaluated by a set of items or questions (9 to 10 questions in average) in the questionnaire.

Afterwards, correlation and regression analyses were conducted to examine the correlation and the predictive ability of each item of the three selected factors and the exam grades of the participants. Results showed conscientiousness to be the factor that most significantly and consistently correlated with grades in both courses. The correlations between this factor and exams grades ranged from 0.171 (p<.05) to 0.389 (p< .001), so it can be said that scoring in conscientiousness is significantly related to academic performance in the sample (Attia, 2013).

The second selected factor, extraversion showed significant negative correlation with grades of both courses. The correlations between this factor and grades of the participants ranged from -0.175 (p< .05) to -.2, (p< .01). This means that extraversion level is significantly associated with academic achievement in the sample while no significant correlation was found between grades and the third selected factor: emotional stability. The present study provides evidence supporting the validity of Big Five factors of personality as a potential tool for predicting individuals' global academic and job performance (Attia, 2013). Conversely, Attia's (2013) study disregarded the other who dimensions of the "Big Five" model namely, agreeableness and openness to experience. More so, the study was limited to the education sector by focusing of students' academic performance hence the findings may not apply to other sectors like trading, manufacturing among others.

In Saudi Arabia, Alsuwailem and Elnaga (2016) investigated the relationship between personality and job performance using the five-factor

model. The study revealed that, conscientiousness and extraversion appear to be positively correlated with productivity and performance. Neuroticism and agreeableness are negatively correlated with leadership capabilities. Individuals made high performance on conscientiousness, while individuals missing conscientiousness and having neuroticism tend to perform poorly at work. However, Alsuwailem and Elnaga's study was a theoretical paper hence their study did not provide any empirical contribution to current literature.

In Pakisatan, Waheed *et al.* (2017) investigated the relationship between the five-factor model of personality trait and sales performance. Pearson's correlation models as well as analysis methodologies were employed to gather descriptive statistics, reliability analysis, and the analytical hierarchy process (AHP). Cronbach alpha value helped determine the internal consistency of the group items. Questionnaires were distributed among 600 salespersons in various cities of Pakistan from April 2015 to January, 2016. Subsequently, 510 questionnaires were acquired from the sample. The study contributed to the literature on personality trait and ales performance by applying empirical evidence from sales managers in three industries of Pakistan: pharmaceutical, insurance, and electronics.

The result affirmed a positive effect of five-factor model on sales performance among various industries in Pakistan. The effect of each subfactor from the five-factor model was examined autonomously. There is a favourable benefit to sales managers in considering FFM when making hiring decisions. Despite the study's contribution to the body of knowledge, the study was limited to sales performance in the various companies. The

researcher did not consider other equally important performance measures in those companies.

Finally, Ghani *et al.* (2016) assessed leader's personality trait and employees' job performance in the public sector, Putrajaya in Malaysia. The respondent selected were those who worked as government servant in public sector. A convenient sampling method was utilised to select 150 respondents from lower and middle level management of government servants. The research design used for the study was correlational in view of it appropriateness to tests statistical relationship between variables. Reliability analysis was conducted by computing Cronbach's Alpha coefficient for each variable.

The result showed that the highest Alpha coefficient is extraversion with .908, followed by openness to experience variable with value .897, agreeableness with value .888, neuroticism with value .873 and lastly, conscientiousness with value .854. According to Pallant (2007), Cronbach Alpha coefficient of 0.70 and above is reliable and recommended. Furthermore, Salkind (2014) stated that a value of 1.00 would be perfect reliability. Based on the finding, all of these variables have a value of above .800 that is closer to a value of 1.00 and this indicates the degree of reliability is very high (Ghani *et al.*, 2016).

Correlational analysis was adopted to analyse the relationship between the five main independent variables, neuroticism; extroversion; openness to experience; conscientiousness; agreeableness and employee job performance as dependent variable. Results confirmed that, there are four variables of leaders' personality traits that have significant and positive relationship with

employee job performance. The four variables are extroversion, openness to experience, conscientiousness and agreeableness and agreeableness has shown the highest significant correlation with employee job performance. Contrariwise, neuroticism was found to be negatively related with employee job performance. Moreover, employee job performance is considered crucial in all organisations since it will affect the production and reputation of an organisation (Ghani *et al.*, 2016).

As for the employee job performance, it was found that the leaders personality play an important role since it influence job performance between the employee. Therefore, the study provides good determinant factors for the organisation to concern about leadership personality, which are extroversion, openness to experience, conscientiousness and agreeableness in order to increase level of employee job performance since personality found to be associated with followers' performance (Ghani *et al.*, 2016). Yet, the study is weak for several reasons. Firstly, the study has been limited to the public sector at the expense of the private sector since they may have different culture and work environment.

Furthermore, the results of the study were generated from a nonprobability sample (convenience sampling) hence, members of the population were not given equal and independence chance of being selected. This research project therefore intends to bridge the gap in literature by exploring the effect of the "Big Five" personality traits on job performance of SMEs in Takoradi Metropolis.

### **Conceptual Framework**

As mentioned earlier, the conceptual framework showed the researchers' idea on how the "Big Five" personality trait and job performance nexus is explored. It dwelled on time tested theories that embody the findings of numerous investigations on how phenomena occur. Therefore, Figure 1 illustrated the relationship between the "Big Five" personality traits and job performance, where the "Big Five" personality trait is seen as the independent variable and job performance as the dependent variable. The "Big Five" personality trait is measured by Extraversion, Neuroticism, Conscientiousness, Agreeableness, and Openness; whilst customer satisfaction, productivity (output), profits, customer grievances, public credibility, sales volume, and customer loyalty (repeat-purchases) are used to measure job performance of SMEs in Takoradi Metropolis. This conceptual framework was based on the detailed review of literature on the research area.

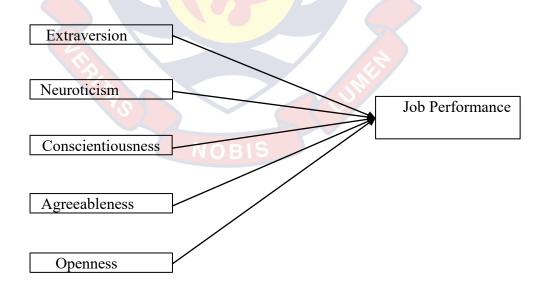


Figure 1: Conceptual framework of the study

Source: Adopted from Askarian and Eslami (2013, p. 324)

# **Chapter Summary**

The chapter began with an introduction, followed by a discussion on the Big Five Personality Theory, which provided guidance for the study. The chapter continued by explaining the concept of job performance, the bif five personality dimensions and job performance, definition and classification of SMEs globally, and Definition of SMEs in Ghana. Successively, the empirical review was discussed. Finally, the conceptual framework of the study was



### **CHAPTER THREE**

### **RESEARCH METHODS**

# Introduction

This chapter sought to present the research approach, research design, population of the study, sample size and the sampling procedure, data collection procedures, data analysis, and ethical considerations. It is important to follow these academic research procedures to ensure that it becomes replicable and easy to understand so that it can be compared to any other research work.

### **Research approach**

The study adopted the quantitative research approach. Among the many advantages of quantitative research approach is its ability to enhance speed of conducting a research. Further, it offers a broader coverage of a series of events where statistics are combined from a larger sample (Amarantunga & Baldry, 2002). In addition, quantitative approach enhances the use of statistical data analysis methods, thus, making it easier to generalise the findings from the study. In addition, quantitative approaches take the guesswork to a more concrete conclusion. This is because the results are usually based on quantitative measures rather than mere interpretation and therefore enables future application and comparison with other works.

It should however be noted that, this approach to research approach lacks flexibility and, thus, makes it very challenging to apply same in assessing or gauging human behaviour (Crotty, 1998). According to Boohene (2006), the choice of research approach should be based on the researcher's discretion, depending on the nature of a particular study. Therefore, given the

purpose and nature of this study where most of the analyses are quantitative in nature, quantitative research approach is deemed the most appropriate and therefore adopted.

# **Research design**

A descriptive research design was adopted for this study. The descriptive research is considered conclusive in nature due to its quantitative nature. The descriptive research design was selected mainly because it comprises a cross-sectional design in relation to which data are collected predominantly by questionnaire or by structured interview (Bryman & Bell, 2007). It also provides evidence concerning an existing situation or current conditions; hence surveys provide a more accurate picture of events and seek to explain people's perception and behaviour on the basis of data gathered at a point in time. In addition, it has the advantage of producing good responses from a wide range of people in a highly economically way and also it involves accurate and objective collection of data to describe an existing phenomenon (Nwandinigwe, 2005).

# **Population**

A population is made up of all the units of the group that the research emphases on. Malhotra (1996) opines that the members or units of the group should possess material facts relevant to the study and the researcher. According to Rubin and Babbie (2001), target population is "the theoretically specified aggregation of study elements". All 115,577 SMEs (with or without employees) operating in the Takoradi Metropolis (Table 1) constituted the population of the study.

	Both Sez	xes	Male		Female	
Employment Status	Number	%	Number	Per cent	Number	Per cent
Total Employed	215,273	100.0	104,521	100.0	110,752	100.0
Employee	78,772	36.6	54,619	52.3	24,153	21.8
SMEs without						
employee(s)	101,593	47.2	31,968	30.6	69,625	62.9
SMEs with						
employee(s)	13,984	6.5	7,614	7.3	6,370	5.8
Casual worker	5,098	2.4	3,815	3.6	1,283	1.2
Contributing family						
worker	6,497	3.0	1,932	1.8	4,565	4.1
Apprentice	7,928	3.7	3,931	3.8	3,997	3.6
Domestic employee						
(House help)	1,015	0.5	429	0.4	586	0.5
Other	386	0.2	213	0.2	173	0.2

## Table 1: Employment Status of Takoradi Metropolis

Source: Ghana Statistical Service (2014)

# **Sampling Procedure and Sample size**

According to Evans, Hastings and Peacock (2008), sample size is the number of observations in a sample. It is commonly denoted by n or N. The study adopted the sample size formula for finite population proposed by Krejcie and Morgan (1970). From Table 2, a sample size of 383 is appropriate for a finite or known target population of 115,577 (13,984 + 101,593) which falls within 75,000 and 1,000,000. According to Krejcie and Morgan (1970), there is no need of using sample size determination formula for 'known' population since the table has all the provisions one requires to arrive at the required sample size.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
Note: N	Note: N is Population Size; S is Sample Size Source: Krejcie & Morgan, 1970						n, 1970		

Regarding sampling method, the researcher adopted the proportional stratified sampling technique of the probability sampling method to select the 383 SMEs operating within the Takoradi Metropolis. Stratified sampling method is a method of dividing the population into two or more segments called strata (plural). Afterwards, simple random samples were drawn from each stratum (singular) and these sub-samples are put together to form the complete stratified sample. Using the total population in each of the 20 communities (GSS, 2010) in the Takoradi Metropolis, the researcher used the proportional stratified sampling method to show how the 383 SMEs were selected to form a complete stratified sample. This sampling method allowed for each community to have equal and independent chance of being selected, making it more accurate and representative. This is shown in Table 3.

Communities	Population	Workings	Sample
			Size
1. Takoradi	76,665	(76,665/475,157)*383	62
2. Effiakuma	60,932	(60,932/475,157)*383	49
3. Kwesimintsim	40,542	(40,542/475,157)*383	33
4. Kojokrom	37,722	(37,722/475,157)*383	30
5. West Tanokrom	35,616	(35,616/475,157)*383	29
6. Anaji	31,669	(31,669/475,157)*383	26
7. Sekondi	30,453	(30,453/475,157)*383	25
8. New Takoradi	21,924	(21,924/475,157)*383	18
9. Essikado	20,212	(20,212/475,157)*383	16
10. Apremdo	14,106	(14,106/475,157)*383	11
11. Kweikuma	13,570	(13,570/475,157)*383	11
12. Ntankoful	13,439	(13,439/475,157)*383	11
13. Ngyiresia	11,861	(11,861/475,157)*383	10
14. East Tanokrom	11,689	(11,689/475,157)*383	9
15. Effia-Village	10,936	(10,936/475,157)*383	9
16. Fijai	9,729	(9,729/475,157)*383	8
17. Assakai	9,139	(9,139/475,157)*383	7
18. Adiembra	8,519	(8,519/475,157)*383	7
19. Kansaworado	8,228	(8,228/475,157)*383	7
20. Nkroful	8,206	(8,206/475,157)*383	7
Total	475,157		383

## Table 3: Proportional Stratified Sampling Method

Source: Author computation, Blay (2017)

# **Data Collection Instrument**

Primary data was collected by the use of self-administered questionnaire on 383 SMEs (with or without employees) operating within the Takoradi Metropolis. Respondents constituted owner-managers of these SMEs. The questionnaire was designed in a way so as to provide specific responses to answer the research questions. The questionnaire consisted of 35 items which were divided into three sections: 'Section A' captured the demographic characteristics of respondents; 'Section B' collected data on the "Big Five" personality trait dimensions while 'Section C' focused on Job Performance of SMEs in Takoradi Metropolis. Statements that made up Sections B and C on the questionnaire were measured on a seven-point likert scale with Score '1' indicating '*Least Agreement*' and Score '7' indicating

*'Highest Agreement'* with statements (indicators) provided. Items that measured personality traits were sourced from the study by Echchakoui (2013) containing 25 items. On the other hand, items that measured job performance was source from the study by Alsuwailem and Elnaga (2016), containing six items.

## **Data Processing and Analysis**

Quantitative techniques were used in analysing and presenting the data. Quantitative data obtained from the questionnaires were coded and analysed with the help of Statistical Software for Social Sciences (SPSS) for windows, version 24. Each of the questions was coded in variable view of the SPSS and the responses from the respondents were entered at data view of the SPSS. Data was analysed based on the stated objectives of the study. Descriptive statistics (mean and its associated standard deviation) as well as inferential statistics (correlation, regression analysis) were used to describe continuous data. For categorical data, frequency tables with their associated percentages were used. Multiple regression analysis was used to answer all the five objectives of the study.

# **Ethical Considerations**

In order to ensure strict compliance with ethical standards of research, there was a clause in the introductory paragraph of the questionnaire assuring respondents of anonymity and confidentiality. Finally, the time required for filling the questionnaire was mutually agreed between the respondents and the researcher.

# **Chapter Summary**

The chapter began with an introduction. The quantitative research approach was adopted for the study. The research design was descriptive. The population of the study was 115,577 SMEs (with or without employees) operating in the Takoradi Metropolis. Using Krejcie and Morgan's (1970) formula, the sample size was stated as 383. Owner-mangers of SMEs served as study subjects. The proportional stratified sampling technique of the probability sampling method was used to select the within the Takoradi Metropolis.

A questionnaire was used as the sole instrument for data collection and it was self-administered. Items in the questionnaire were sourced from prior studies in the area. Statements on the questionnaire were measured on a sevenpoint Likert scale with Score '1' indicating '*Least Agreement*' and Score '7' indicating '*Highest Agreement*'. Multiple regression analysis of SPSS was used to answer all the five objectives of the study. Ethical issues considered were anonymity and confidentiality, and informed consent.

### **CHAPTER FOUR**

#### **RESULTS AND DISCUSSION**

# Introduction

First and foremost, this chapter looked at the demographic characteristics of the respondents comprising their age, sex, highest education qualification achieved and type of business. After that, descriptive statistical tools (mean and its associated standard deviation) were used to examine the personality traits of owner-managers in SMEs, and to assess the job performance of SMEs in the Takoradi Metropolis over the past two years. Finally, inferential statistics (Pearson's correlation coefficient, regression analysis) were used to ascertain the relationship between the Big Five personality trait dimensions (extraversion, conscientiousness, openness to experience, neuroticism, and agreableness) and job performance of SMEs in the Takoradi Metropolis.

## **Demographic Characteristics**

This section highlighted the demographic characteristics of respondents. It described respondents' age, sex, highest educational qualification achieved, and type of business. It must be emphasised that, out of the 383 questionnaires distributed to owner-managers in SMEs in the Takoradi Metropolis, 342 completed questionnaires were retrieved and used for data analysis. Consequently, a return rate of 89.30% was achieved. With respect to respondent's age, it came to light that a greater number of respondents (n=154, representing 45.03%) fell within the "36 - 45 years" age category, followed by "26 - 35 years" age category (n=99, representing 28.95%), then "18 - 25 years" age category (n=51, representing 14.91%) and finally, "46 and above"

age category (n=38, representing 11.11%). This indicates that most of the respondents were adults hence their responses can be taken as the true reflection regarding the answers to the items on the questionnaire (Table 4).

Particulars	F	%
Age:		
18 - 25 years	51	14.91
26 - 35 years	99	28.95
36 - 45 years	154	45.03
46 and above	38	11.11
Sex:		
Male	154	45.03
Female	188	54.97
Highest education qualification achieved:		
Secondary/Technical	228	66.67
Tertiary	114	33.33
Type of Business:		
Trading	125	36.55
Consultancy services NOBIS	51	14.91
Manufacturing	35	10.23
Catering services	23	6.73
Artisanry	108	31.58

# **Table 4: Demographic Characteristics**

Field survey (2018)

Considering the sex of respondents, males constituted 45.03% (n=154) while females constituted 54.97% (n=188) signifying that the respondents

were female dominated (Table 4). Regarding the highest educational qualification achieved by respondents, findings revealed that majority of the respondents (n=228, representing 66.67%) have attained Secondary/Technical certifications whereas the remaining 114 respondents (representing 33.33%) indicated that they have tertiary certifications. This presupposes that all of the respondents have had some form of formal education which facilitated their understanding of the questions upon which they were able to make informed contributions to the study (Table 4).

Last, but not the least, a greater number of 125 respondents (representing 36.55%) was engaged in Trading activities, closely followed by Artisany (n=108, representing 31.58%). Further analysis revealed that 51 respondents (signifying 14.91%) operated Consultancy services including mobile money vendors, architecture, building and construction, secretarial services just to name a few. Catering services were provided by 23 respondents and the remaining 35 respondents were engaged in manufacturing activities.

# Validity and Reliability

Validity and reliability of a study are two key elements in ensuring that the study is valid and scientific. The strengths of the research instrument were that, first of all, it comprised various sections that answer the research objectives respectively. In addition, the instrument was consistent with the concepts and constructs found in the conceptual framework. Moreover, a pretest was done to test validity of the instrument so as to ensure the reliability of the results.

### Validity of research instruments

A pre-test to establish the instrument's validity was carried out on 35 owner-managers in a similar study area with an aim to improve the use of the primary data. All 35 questionnaires issued to the respondents were recovered. This improved the validity, which made the quality of research trustworthy and scientific. As explained by Mugenda and Mugenda (2003), pre-test study allows errors to be discovered enabling effective revision as it results in determination of participants' interest, discovering if the questions have meaning for the participants, checking for the participants' modification of the questions' intent and whether what the researcher is measuring is what was intended to be measured. The instruments were found to measure what the study intended to measure and the questions were clear and easily understood by the respondents. The research tool was also verified by a supervisor in the form of expert judgement.

### **Instrument** reliability

In order to validate internal consistency of the research constructs, the researcher used SPSS for windows, version 24 to generate Cronbach's Alpha coefficient for each of the constructs on the pre-test data. The reliability coefficient for the pre-test data is shown in Table 5. Research has shown that scales with Cronbach's alpha co-efficient of 0.70 or more are considered reliable (Hair et al., 2014; Pallant, 2007). Results from the Pre-Test as indicated in the Table 5 showed Cronbach's Alpha of 0.70 or more for each of the constructs used in the study. This, therefore, suggests that all the six constructs used in the study have good internal consistency reliability.

Constructs	Number of Items	Cronbach's Alpha
Extraversion	5	0.710
Conscientiousness	6	0.795
Openness to experience	4	0.901
Neuroticism	4	0.814
Agreeableness	6	0.914
Job performance in SMEs	6	0.817

## Table 5: Computed Reliability Coefficients for Pre-Test Data

Source: Field survey (2018)

### **Descriptive Statistics**

Prior to finding answers to the research objectives specified, the descriptive statistics for each of the study variables were determined. To achieve this objective, the data for each of the study variables were analysed into mean scores on a scale of 1.00 to 7.00 with 1.00 to 3.90 indicating *low level of agreement* and 4.00 to 7.00 indicating *high level of agreement* (Degue, 2017). These analyses were done in order to enhance the understanding of the dimensions of the Big Five Personality traits and job performance in SMEs. Since the Big Five personality trait dimensions were made up of five elements namely; extraversion, conscientiousness, openness to experience, neuroticism, and agreeableness, it was appropriate to analyse each dimension exclusively. Therefore, the discussion began with the agreeableness trait as a component that influences the overall personality traits of owner-managers in SMEs.

# Extraversion

In examining the level of extraversion among owner-mangers in small and medium-sized enterprises, five indicators were measured on a seven-point Likert scale (Table 6). Score '7' showed the strongest agreement while score '1' showed the least agreement. These scores are generalised based on respondents' level of agreement with each the positive statements provided under "Extraversion" on the questionnaire.

			•
1 9 hl	a 6.	Hytro	version
1 and	<b>U</b> .	Глиа	10131011

SN	Indicators	Mean	SD
1	I feel comfortable around people.	6.38	0.914
2	I talk to a lot of different people.	5.32	1.041
3	I start conversations.	5.27	1.214
4	I do not mind being the centre of attraction.	4.12	0.814
5	I am the life of the party.	4.09	1.987
Ove	rall Mean Score	5.04	0.798

Scale (Mean): Low = 1.00 - 3.90; High = 4.00 - 7.00

Source: Field survey (2018)

As shown in Table 6, the mean of "I feel comfortable around people" as an indicator is 6.38 with a degree of variance from a standard deviation of 0.914, suggesting high level of agreement from respondents. Likewise, the mean of "I talk to a lot of different people" as an indicator is 5.32 with a degree of reliability from a standard deviation of 1.041, demonstrating high level of agreement from respondents. Similarly, the mean of "I start conversations" as an indicator is 5.27 with a degree of variability from a standard deviation of 1.214, indicating high level of agreement from respondents.

By the same token, the mean of "I do not mind being the centre of attraction" as an indicator is 4.12 with a degree of reliability from a standard

deviation of 0.814, suggesting high level of agreement from respondents. Finally, the mean of "I am the life of the party" as an indicator is 4.09 with a degree of reliability from a standard deviation of 0.798, suggesting high level of agreement from respondents (Table 6). The findings above showed that owner-managers in small and medium enterprises score high on extraversion. This is manifested in the mean scores of all the five indicators which were more than 3.90. In support of that, the overall mean score from Table 6 is 3.89 and this confirmed the high score on agreeableness trait and this trait has been found to predict effective functioning and well-being across a wide variety of domains (Alsuwailem & Elnaga, 2016) including SME operations.

# Conscientiousness

For the purpose of ascertaining the level of conscientiousness among owner-mangers in small and medium-sized enterprises, six indicators were measured on a seven-point Likert scale (Table 7). Score '7' showed the strongest agreement while score '1' showed the least agreement. These scores are generalised based on respondents' level of agreement with each the positive statements provided under "Conscientiousness" on the questionnaire.

 Table 7: Conscientiousness

SN	Indicators NOBIS	Mean	SD
1	I get chores done right away.	6.42	1.024
2	I am always prepared.	6.33	0.962
3	I pay attention to details.	5.32	0.718
4	I follow a schedule.	5.18	0.912
5	I am exiting in my work.	5.11	1.234
6	I like order.	4.96	1.365

### Table 7, continued

Overall Mean Score	5.55	

Scale (Mean): Low = 1.00 - 3.90; High = 4.00 - 7.00

Source: Field survey (2018)

As seen in Table 7, the mean of "I get chores done right away" as an indicator is 6.42 with a degree of variability from a standard deviation of 1.024, indicating high level of agreement from respondents. In the same way, the mean of "I am always prepared" as an indicator is 6.33 with a degree of reliability from a standard deviation of 0.962, suggesting high level of agreement from respondents.

Equally, the mean of "I pay attention to details" as an indicator is 5.32 with a degree of variability from a standard deviation of 0.718, demonstrating high level of agreement from respondents. Moreover, the mean of "I follow a schedule" as an indicator is 5.18 with a degree of reliability from a standard deviation of 0.912, indicating high level of agreement from respondents. In like manner, the mean of "We build trust with our customers", as an indicator is 5.11 with a degree of variability from a standard deviation of 1.234, demonstrating high level of agreement from respondents. Similar to that, the mean of "I like order" as an indicator is 4.96 with a degree of reliability from a standard deviation of 1.365, suggesting high level of agreement from respondents (Table 7).

The outcomes above showed that owner-managers in small and medium enterprises score high on conscientiousness. This is evident as the mean scores of all the six indicators measured were more than 3.90. To buttress the result, the overall mean score from Table 7 is 5.55 and this analysis confirms the high score on conscientiousness trait. Authors (Ghani *et al.*, 2016; Seng *et al.*, 2013; Waheed *et al.*, 2017) have argued that individuals who score high in conscientiousness are usually good at formulating long-term goals, organising and planning routes towards achievement and work persistently to achieve goals and these activities are necessary for the success of the SME owner-manager.

# **Openness to experience**

For the purpose of assessing the level of openness to experience among owner-mangers in small and medium-sized enterprises, four indicators were measured on a seven-point Likert scale (Table 8). Score '7' showed the strongest agreement while score '1' showed the least agreement. These scores are generalised based on respondents' level of agreement with each the positive statements provided under "Openness to experience" on the questionnaire.

Table 8: Openness to Ex
-------------------------

SN	Indicators	Mean	SD
1	I have excellent ideas.	5.83	0.946
2	I am full of ideas.	5.77	0.816
3	I am quick to understand things.	5.51	1.346
4	I use difficult words.	3.49	1.123
Overall Mean Score		5.15	

Scale (Mean): Low = 1.00 - 3.90; High = 4.00 - 7.00

Source: Field survey (2018)

As depicted in Table 8, the mean of "I have excellent ideas" as an indicator is 5.83 with a degree of variability from a standard deviation of 0.946. This result signifies high level of agreement from respondents. In the same vein, the mean of "I am full of ideas" as an indicator is 5.77 with a degree of reliability from a standard deviation of 0.816, indicating high level of agreement from respondents. On the same side of the coin, the mean value of "I am quick to understand things" as an indicator is 5.51 with a degree of variability from a standard deviation of 1.346, suggesting high level of agreement from respondents. Contrariwise, the mean of "I use difficult words" as an indicator is 3.49 with a degree of reliability from a standard deviation of 1.123, demonstrating low level of agreement from respondents (Table 8).

The findings above indicated that owner-managers in small and medium enterprises score high on openness to experience. This is evident as the mean scores of three indicators (out of the four indicators measured) were more than 3.90. In support of that, the overall mean score from Table 8 is 5.15 and this result confirmed the high score on openness to experience trait. Scoring high on openness to experience has been found by several researchers (Alsuwailem & Elnaga, 2016; Ferreira & Nascimento, 2016; Ghani *et al.*, 2016) to be useful when it comes to situations that require tolerance and risk which is characteristic of SME operations.

# Neuroticism

In examining the level of neuroticism among owner-mangers in small and medium-sized enterprises, four indicators were measured on a seven-point Likert scale (Table 9). Score '7' showed the strongest agreement while score '1' showed the least agreement. These scores are generalised based on

respondents' level of agreement with each the positive statements provided under "Neuroticism" on the questionnaire.

SN	Indicators	Mean	SD
1	I get stressed out easily.	3.84	0.736
2	I get upset easily.	3.78	0.606
3	I get irritated easily.	2.52	1.358
4	I have frequent mood swings.	2.50	1.135
Over	all Mean Score	3.16	

Ta	able	9:	N	eur	oti	cism
----	------	----	---	-----	-----	------

Scale (Mean): Low = 1.00 - 3.90; High = 4.00 - 7.00

Source: Field survey (2018)

As described in Table 9, the mean of "I get stressed out easily" as an indicator is 3.83 with a degree of variability from a standard deviation of 0.736. This result signifies low level of agreement from respondents. In like manner, the mean of "I get upset easily" as an indicator is 3.77 with a degree of reliability from a standard deviation of 0.606, indicating low level of agreement from respondents. In similar terms, the mean value of "I get irritated easily" as an indicator is 2.52 with a degree of variability from a standard deviation of 1.358, suggesting low level of agreement from respondents. Finally, the mean of "I have frequent mood swings" as an indicator is 2.50 with a degree of reliability from a standard deviation of 1.135, demonstrating low level of agreement from respondents (Table 9).

The outcomes above revealed that owner-managers in small and medium enterprises score low on neuroticism. This is manifested in the mean scores of all the four indicators measured which were less than 3.90. To add to that, the overall mean score from Table 9 is 3.16 and this confirmed the low score on neuroticism trait. According to researchers (Attia, 2013; Seng *et al.*, 2013), individuals who score low in neuroticism can be characterized as self-confident, calm, even tempered and relaxed and these adjectives are typical of the SME owner-manager.

# Agreeableness

In assessing the level of agreeableness among owner-mangers in small and medium-sized enterprises, six indicators were measured on a seven-point Likert scale (Table 10). Score '7' showed the strongest agreement while score '1' showed the least agreement. These scores are generalised based on respondents' level of agreement with each the positive statements provided under "Agreeableness" on the questionnaire.

Table 10: Agreeableness

SN	Indicators	Mean	SD
1	I am interested in people.	4.83	0.847
2	I sympathize with others feeling.	4.77	0.717
3	I take time out for others.	3.51	1.247
4	I have a soft heart.	3.49	1.024
5	I feel others' emotions. BIS	3.42	0.818
6	I make people feel at ease.	3.30	0.687
Overall Mean Score		3.89	

Scale (Mean): Low = 1.00 - 3.90; High = 4.00 - 7.00

Source: Field survey (2018)

As portrayed in Table 10, the mean of "I am interested in people" as an indicator is 4.83 with a degree of variability from a standard deviation of 0.847. This result signifies high level of agreement from respondents. By the same token, the mean of "I sympathize with others feeling" as an indicator is 4.77 with a degree of reliability from a standard deviation of 0.717, indicating high level of agreement from respondents. On the contrary, the mean value of "I take time out for others" as an indicator is 3.51 with a degree of variability from a standard deviation of 1.247, suggesting low level of agreement from respondents. Equally, the mean of "I have a soft heart" as an indicator is 3.49 with a degree of reliability from a standard deviation of 1.024, demonstrating low level of agreement from respondents.

In addition to that, the mean of "I feel others' emotions" as an indicator is 3.42 with a degree of variability from a standard deviation of 0.818, signifying low level of agreement from respondents. Correspondingly, the mean of "I make people feel at ease", as an indicator is 3.30 with a degree of reliability from a standard deviation of 0.687, suggesting low level of agreement from respondents (Table 10). The results above showed that ownermanagers in small and medium enterprises score low on agreeableness. This is evident as the mean scores for four indicators (out of the six indicators measured) were less than 3.90. In support of that, the overall mean score from Table 10 is 3.89 and this confirmed the low score on agreeableness trait and this trait has been found by several researchers (Alsuwailem & Elnaga, 2016; Ferreira & Nascimento, 2016; Ghani *et al.*, 2016) to be useful when it comes to situations that require absolute or tough objective decisions typical of SME operations.

# Personality traits of owner-mangers in SMEs

Based on the descriptive statistics above, the study found that ownermanagers in small and medium-sized enterprises score high on Extraversion, Conscientiousness and Openness to experience but score low on Neuroticism and Agreeableness. This is displayed in Table 11.

SN	Personality traits	Total	Indicators	Indicators	Overall
		Number of	with Mean	with Mean	Mean
		Indicators	above 3.90	below 3.90	Score
1	Extraversion	5	5	0	5.04
2	Conscientiousness	6	6	0	5.55
3	Openness to				
	experience	4	3	1	5.15
4	Neuroticism	4	0	4	3.16
5	Agreeableness	6	2	4	3.89
Total		25	16	9	

Source: Field survey (2018)

It was also noticed that, among the highly score traits; Conscientiousness was rated highest by respondents, followed by Openness to experience, and finally, Extraversion (Table 12).

Overall Mean	Rank
Scores	
5.55	1 <sup>st</sup>
5.15	$2^{nd}$
5.04	3 <sup>rd</sup>
	Scores 5.55 5.15

## **Table 12: Mean Ranking**

Source: Field survey (2018)

#### Job Performance in SMEs

In examining the job performance in small and medium-sized enterprises, six indicators were measured on a seven-point Likert scale (Table 13). Score '7' shows very high level of performance while score '1' showed very low level of performance. These scores are generalised based on the extent to which respondents indicate how low or high their organisation have performed with respect to the indicators provided under "Job Performance in SMEs" on the questionnaire. As presented in Table 13, the mean of "Over the past two years, our firm has improved sales volume" as an indicator is 5.91 with a degree of variability from a standard deviation of 1.014, showing high level of agreement from respondents.

## **Table 13: Job Performance in SMEs**

\_

\_

SN	Indicators	Mean	SD					
1	Over the past two years, our firm has improved sales	5.91	1.014					
	volume.							
2	Over the past two years, our firm has increased							
	productivity (output).	5.71	0.784					
3	Over the past two years, our firm has improved customer	5.68	1.254					
	satisfaction.							
4	Over the past two years, our firm has successfully been	4.57	0.897					
	increasing its profits.							
5	Over the past two years, has decreased customer	4.54	1.247					
	grievances.							
6	Over the past two years, our firm has achieved customer							
	loyalty as evident in repeat purchases.	4.42	1.321					
Scal	e (Mean): Low = 1.00 – 3.90; High = 4.00 – 7.00							
Sou	Source: Field survey (2018)							
	In the same vein, the mean of "Over the past two years	s, our fi	rm has					
incr	pased productivity (output)" as an indicator is 5.71 wit	h a deo	ree of					

increased productivity (output)", as an indicator is 5.71 with a degree of reliability from a standard deviation of 0.784, suggesting high level of agreement from respondents. Correspondingly, the mean of "Over the past two years, our firm has improved customer satisfaction", as an indicator is 5.68 with a degree of variability from a standard deviation of 1.254, demonstrating high level of agreement from respondents. In addition, the mean of "Over the past two years, our firm has successfully been increasing its profits" as an

indicator is 4.57 with a degree of reliability from a standard deviation of 0.897, indicating high level of agreement from respondents (Table 13).

Similarly, the mean of "Over the past two years, has decreased customer grievances" as an indicator is 4.54 with a degree of variability from a standard deviation of 1.247, showing high level of agreement from respondents. Lastly, the mean of "Over the past two years, our firm has achieved customer loyalty as evident in repeat purchases" as an indicator is 4.42 with a degree of variability from a standard deviation of 1.321, showing high level of agreement from respondents. The results (Table 13) show high level of job performance in SMEs from the perspective of owner-managers since the mean score of all the six indicators measured were more than 3.90.

# **Inferential Statistics**

In order to find answers to the research questions, inferential statistics precisely Pearson's correlation and regression analysis was adopted. Pearson's correlation analysis was first used to determine the nature of the relationships that exist among the variables of interest before proceeding to regression analysis. This was deemed appropriate because correlation just describes the direction and strength of the relationship between variables but does not indicate how much of variation in one variable is accounted by the other (Pallant, 2007). Proceeding to regression analysis would provide an opportunity to test the predictive power of one variable over the other.

# **Pearson's Correlation Coefficient**

Regarding correlation analysis, the simple bivariate correlation (also known as zero-order correlation) of SPSS version 24 was employed and it was subject to two-tailed test of statistical significance. Correlation was considered significant at p<0.01 probability level. As recommended by Pallant (2007), correlation values (r) were interpreted according to Cohen's (1988) guidelines: Very weak (r = .10 to .29 or r = -.10 to -.29); weak (r = .30 to .49 or r = -.30 to -.49); moderate (r = .50 to .69 or r = -.50 to -.69); and large (r = .70 to .99 or r = -.70 to -.99). These guidelines apply whether or not there is a negative sign in front of the r value. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homogeneity of variance.

The result obtained indicated that Extraversion (r = .711, sig value < 0.01), Conscientiousness (r = .814, sig value < 0.01) and Openness to experience (r = .708, sig value < 0.01) had positive and significant relationship with job performance in SMEs (Table 14). This result is similar to a study by Echchakoui (2013) in New Brunswick where the author found that Extraversion, Conscientiousness and Openness to Experience were significantly positively related to performance with customers drawn from an important call centre in Canada. A study by Abdullah, Rashid and Omar (2013) in Pakistan also recorded a positive and significant relationship between Extraversion, Conscientiousness and Openness to Experience on Job performance of employees in the banking sector.

	EXT	CON	OPN	NEU	AGR	JOP
EXT	1					
CON	.712**	1				
OPN	.648	486	1			
NEU	.502	321	.514	1		
AGR	.621**	.874**	.438**	.349**	1	
JOP	.711**	.814**	.708**	517**	612**	1

Table 14:	Correl	lation A	Anal	lysis
-----------	--------	----------	------	-------

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

Notes: EXT= Extraversion; CON=Conscientiousness; OPN= Openness to experience; NEU= Neuroticism; AGR=Agreeableness; JOP=Job performance Source: Field survey (2018)

Moreover, Soegoto et al. (2017) revealed a significant effect of personality (extraversion, conscientiousness, and openness to experience) on employee's performance in Indonesia flight manufacture either simultaneously or partially. Additionally, In Saudi Arabia, Alsuwailem and Elnaga (2016) revealed that, conscientiousness and extraversion appear to be positively correlated with productivity and performance. Furthermore, a study by Ghani *et al.* (2016) in Malaysia found extroversion, openness to experience, conscientiousness to be positively and significantly correlated with employee job performance in the public sector.

Further analysis showed that, Consciousness had the highest association on job performance in SMEs (r = .814, sig value < 0.01). This result is consistent with the findings of several authors in the field. In Iran, Askarian and Eslami (2013) disclosed that conscientiousness had the highest influence on the job performance of the employees of ministry of education of

Kerman. In Indonesia, Soegoto et al. (2017) discovered that conscientiousness had a dominant effect on employee's performance. Further, in Canada, Attia (2013) found conscientiousness to be the factor that most significantly and consistently correlated with students' academic performance. In contrast, a study by Ghani *et al.* (2016) in Malaysia indicated that agreeableness had the highest significant correlation with employee job performance in the public sector.

On the flipside, Neuroticism (r = -.517, sig value < 0.01) and Agreeableness (r = -.612, sig value < 0.01) had negative and significant relationship with job performance in SMEs (Table 14). This result is at variance to a study by Echchakoui (2013) in New Brunswick where the author found that Neuroticism and Agreeableness were significantly negatively related to performance with customers drawn from an important call centre in Canada. A study by Abdullah, Rashid and Omar (2013) in Pakistan also recorded a negative and significant relationship between neuroticism and task and contextual performance of employees in the banking sector.

However, a study by Attia's (2013) in Canada found no significant relationship between neuroticism and academic performance of students. In support of this, in Saudi Arabia, Alsuwailem and Elnaga (2016) revealed that individuals having neuroticism tend to perform poorly at work. In addition, Ghani et al. (2016) found neuroticism to be negatively related to employee job performance in the public sector in Malaysia.

### **Regression Analysis**

Regarding the regression analysis, Table 15 provides information on the relationship between the dependent variable (job performance) and independent variables (extraversion, conscientiousness, openness to experience, neuroticism, agreeableness) indicated as (R); information on the amount of variation in the dependent variable explained by the independent variable indicated as (R-Square); information on the amount of variation in the dependent variable explained by the independent variable as a result of an Adjustment indicated as (Adjusted R-Square); and finally information on autocorrelation in the residual or error term indicated by Durbin Watson.

 Table 15: Relationship, Amount of Variation and Autocorrelation Test

Model Summary

Model				Std. Error of the	Durbin-Watson
	R	R Square	Adjusted R Square	Estimate	
1	.613ª	.547	.514	2.13062	1.577
a. Pred	ictors:	(Constant),	Extraversion, co	nscientiousness,	openness to

experience, neuroticism, agreeableness

b. Dependent Variable: Performance

Source: Field survey (2018)

As shown in Table 15, the R value of .613 indicates the relationship that exists between the dependent variable and the independent variables. So, there is a moderate positive relationship (.613) between job performance and the Big Five personality dimensions. This result suggests that the Big Five personality traits are useful in ascertaining the sources of job performance

among owner-managers in small and medium-sized enterprises and this finding is in line with literature. For instance, in Turkey, Ongore (2013) discovered that the five factor model was useful for examining the dispositional source of job engagement among Kastamonu University academic and administrative personnel. In furtherance of that, Echchakoui (2013) the five factor model was are significantly positively related to performance with customers in Canada using respondents from an important call centre in New Brunswick. Abdullah (2013) added that personality is a good predictor of performance of employees in the banking sector of Pakistan.

Besides, the R Square explains the amount of variation that exists in the dependent variable caused by the independent variables. Therefore, the result further indicates that 54.70% variation in job performance as the dependent variable is explained by the independent variables of personality. The remaining 45.30% of the variation in performance is explained by the residual. This finding suggests that an improvement in the Big Five personality dimensions would result in an increase in job performance in small and medium-sized enterprises. Moreover, the result from the Durbin Watson of 1.577 indicates that there is no autocorrelation among the residuals in the regression model or equation. This is because the Durbin Watson statistics is greater than 1.5 and less than 2.5 as explained in the assumption of the test tool (Table 15).

From Table 16, the test of multicollinearity was assessed using the Tolerance and the VIF (Variance Inflation Factor) from the collinearity diagnostics section. Since the Tolearnce values are all greater than 0.10, it suggest that there is no multicollinerarity among the independent variables.

71

The VIF also indicate that there is no multicollinerarity among the independent variables since the VIF values are all less than 10. In conclusion, the independent variables are not highly correlated among itself.

						Colline	arity
	Unstandardized		Standardized			Statis	tics
	Coeffi	cients	Coefficients				
		Std.				Tolerance	e VIF
Model	В	Error	Beta	Т	Sig.		
						<u>.</u>	
1 (Constant)	3.568	.514		10.248	.000		
Extraversion	.272	.047	.359	5.814	.021	.714	1.142
Conscientiousness	.031	.070	.032	.452	.000	.314	2.147
Openness to							
experience	.261	.045	.349	4.214	.014	.723	2.102
Neuroticism	112	.046	302	516	.000	.612	1.264
Agreeableness	005	.003	088	-1.671	.000	.804	1.244

# Table 16: Coefficient and Multicollinearity Test

a. Dependent Variable: Performance

Source: Field survey (2018)

Secondly, estimating the functional regression equation using the unstandardized coefficient implies that the researcher intends to predict and forecast, therefore, the constant term from the results is 3.568, the coefficient of Extraversion is 0.272, the coefficient of Conscientiousness is 0.031, the coefficient of Openness to experience is 0.261, the coefficient of Neuroticism

is -0.112, and the coefficient of Agreeableness is -0.005. From the decision rule, when Sig. values are less than 0.05, reject the null hypothesis and when Sig. values are greater than 0.05, fail to reject null hypothesis.

The Sig. value of Extraversion coefficient is .021 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Extraversion is significant. Additionally, the Sig. value of Conscientiousness coefficient is .000 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Conscientiousness is significant. In furtherance of that, the Sig value of Openness to experience coefficient is 0.014 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Openness to experience coefficient is 0.014 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Openness to experience coefficient is 0.014 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Openness to experience is significant. Also, the Sig value of Neuroticism coefficient is 0.000 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Neuroticism is significant. Last, but not the least, the Sig value of Agreeableness coefficient is - 0.005 which is less than 0.05 hence we reject null hypothesis and conclude that the coefficient of Agreeableness is significant.

Therefore, estimating the Final Regression Equation Model becomes,

JOP = 3.568 + 0.272EXT + 0.031CON +0.261OPN - 0.112NEU - 0.005AGR +ε, where: NOBIS

JOP= Job Performance, EXT= Extraversion, CON=Conscientiousness, OPN=Openness to experience, NEU= Neuroticism, AGR=Agreeableness and  $\varepsilon$  = Error or residual term.

#### **Summary of Findings**

1) Owner-managers in small and medium-sized enterprises score high on Extraversion, Conscientiousness and Openness to experience but score low on Neuroticism and Agreeableness.

 Owner managers in small and medium-sized enterprises scored highest on Conscientiousness.

3) There is high level of job performance in SMEs from the perspective of owner-managers.

4) Extraversion, Conscientiousness and Openness to experience had positive and significant relationship with job performance in SMEs.

5) Consciousness had the highest influence on job performance in SMEs.

6) Neuroticism and Agreeableness had negative and significant relationship with job performance in SMEs.

7) There is a moderate positive relationship (.613) between job performance and the Big Five personality dimensions.

8) 54.70% variation in job performance as the dependent variable is explained by the independent variables of personality.

# 74

#### **CHAPTER FIVE**

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

# Introduction

This chapter presented the summary of the study including major findings derived from the study. Conclusions arrived and recommendations arising from the findings were provided in this chapter.

## **Summary of the Study**

This study analysed the effect of the Big Five personality traits of owner-managers on the job performance of SMEs in the Takoradi Metropolis. Quantitative research methodology was deemed the most appropriate and therefore adopted hence the analyses were quantitative in nature. The study adopted the descriptive research design. The population constituted all 115,577 SMEs (with or without employees) operating in the Takoradi Metropolis. The study adopted the sample size determination formula for a 'known' population which has been proposed by Krejcie and Morgan (1970). Additionally, stratified sampling technique of the probability sampling method was used to select 383 SMEs operating within the Takoradi Metropolis. Respondents constituted owner-managers of those SMEs.

A structured questionnaire was the main instrument for data collection. The self-administered questionaire process was used for data collection. Thus, data was primary in nature. The questionnaire was designed based on prior studies. Data collection was aided by field assistants and covered a period of five weeks (1<sup>st</sup> August to 5<sup>th</sup> September, 2018). The questionnaire consisted of 35 items which were divided into three sections: 'Section A' captured the demographic characteristics of respondents; 'Section B' collected data on the

"Big Five" personality trait dimensions while 'Section C' focused on Job Performance of SMEs in Takoradi Metropolis. Statements that made up Sections B and C on the questionnaire were measured on a seven-point likert scale with Score '1' indicating '*Least Agreement*' and Score '7' indicating '*Highest Agreement*' with statements (indicators) provided.

First of all, the questionnaire was pre-tested on 35 owner-managers in a similar study area to ensure validity and reliability of results, which made the quality of research trustworthy and scientific. The instrument was found to measure what it intended to measure and the questions were clear and easily understood by the respondents. The research tool was also verified by a supervisor in the form of expert judgement. Descriptive statistics (mean scores, standard deviation) as well as inferential statistics (Pearson's correlation coefficient, regression analysis) were used to describe continuous data.

For categorical data, frequency tables with their associated percentages were used. In order to ensure strict compliance with ethical standards of research, a clause has been introduced at the introductory paragraph of the questionnaire which assures respondents of anonymity and confidentiality. Further, the time required for filling the questionnaire was mutually agreed between the respondents and the researcher. The findings of the showed that: 1) Extraversion had positive and significant relationship with job performance

in SMEs.

2) Conscientiousness had positive and significant relationship with job performance in SMEs.

3) Openness to experience had positive and significant relationship with job

performance in SMEs.

4) Neuroticism had negative and significant relationship with job performance in SMEs.

5) Agreeableness had negative and significant relationship with job performance in SMEs.

#### Conclusions

The study analysed the effect of the Big Five personality traits of owner-managers on the job performance in SMEs in the Takoradi Metropolis. The study concluded that the Big Five personality traits are useful in ascertaining the sources of job performance among owner-managers in small and medium-sized enterprises. Further to that, an improvement in the Big Five personality dimensions would result in an increase in job performance in small and medium-sized enterprises. Particularly, owner-managers who score high on Extraversion, Conscientiousness and Openness to experience are likely to be more successful in their businesses.

## Recommendations

After analysing the effect of the Big Five personality traits of ownermanagers on the job performance in SMEs in the Takoradi Metropolis, it is proper to make recommendations to help promote the survival, growth, and performance SMEs within the metropolis. The study recommends that persons with high level of Extraversion, Conscientiousness and Openness to experience should be encouraged to venture into entrepreneurship. In addition, government, donors and businessmen who are interested in developing young entrepreneurs should consider individuals who score high on Extraversion, Conscientiousness and Openness to experience. Moreover, SME owner-

managers who wish to be successful in their business should consider recruiting employees who score high on Extraversion, Conscientiousness and Openness to experience to enable them survive in the mist of competition.

## **Suggestion for Future Research**

The study recommends further studies to be conducted on this research area. However, this time round, the population should be extended to regional level, say, SMEs in the Western Region of Ghana so as to provide a more meaningful picture. To add, the relationship between the Big Five Personality dimensions and financial behaviour of owner-managers in SMEs is recommended for future studies, so that it would inform SME donors and funders which owner-managers can better manage their funds.



#### REFERENCES

- Abdullah, I., Rashid, Y., & Omar, R. (2013). Effect of personality on job performance of employees: Empirical evidence from banking sector of Pakistan. *Middle-East Journal of Scientific Research*, 17(12), 1735-1741. Retrieved from http://doi: 10.5829/idosi.mejsr.2013.17.12.1552.
- Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International research journal of finance and economics*, 39(6), 215-228.
- Ackah, J., & Vuvor, S., (2011). The challenges faced by Small and Medium Enterprises (SMEs) in obtaining credit in Ghana. Master's Thesis in Business Administration, School of Management, Blekinge Institute of Technology, Sweden.
- Adam, A. M. (2015). *Statistics for business research: A guide for nonstatisticians*. Cape Coast: Global Research Publishers.
- Alsuwailem, A., & Elnaga, A. A. (2016). Exploring the relationship between personality and job performance. New approach. *International Journal of Business and Management Invention*, 5(12), 43-53. Retrieved from www.ijbmi.org.
- Amarantunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities*, 20(5/6), 217-223.
- Amarantunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities*, 20(5/6), 217-223.

- Amero, J. (2017). Financing micro, small and medium enterprises as a strategy for reducing graduate unemployment in Cape Coast Metropolis. Unpublished master's thesis, Department of Management, School of Business, College of Humanities and Legal Studies, University of Cape Coast, Ghana.
- Anokyewaa, C. (2016). Computerized record keeping among small and medium enterprises-a case study in Sunyani Municipality. Unpublished master's thesis, School of Business, College of Arts and Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Asamoah, S. E. (2014). Customer based brand equity (CBBE) and the competitive performance of SMEs in Ghana. *Journal of Small Business and Enterprise Development*, 21(1), 117-131.
- Asare, A. O. (2014). Innovative ways of gaining access to funds for smes setups in Ghana. European Journal of Business and Management, 6(29), 86-89.
- Askarian, N., & Eslami, H. (2013). The relationship between personality trait and job performance (Case study: employees of the ministry of education of Kerman). *Interdisciplinary Journal of Contemporary Research in Business, 5*(8), 322-335. Retrieved from http://ijcrb.webs.com.
- Attia, N. (2013). Big five personality factors and individual performance.
  Unpublished master's thesis, Department of Economic and
  Administrative Sciences, Université du Québec à Chicoutimi, Canada.

- Awais, B. M., Mohamed, B. M., Rageh, I. A., & Pandiyan, S. V. (2014).
  Effects of personality traits (big five) on expatriates adjustment and job performance. *Equality, Diversity and Inclusion: An International Journal*, 33(1), 73-96.
- Bartram, D. D. (1996). The relationship between ipsatized and normative measures of personality. *Journal Of Occupational & Organisational Psychology*, 69(1), 25-39.
- Bolton Report. (1991). *Committee of inquiry on small firm*. HMSO, Cmmd 4811.
- Boohene, R. A. (2006). Tracking the pathway: Explaining gender differences in performance among small business owners in a transition economy.
  Unpublished doctoral thesis, University of New England, Australia.
- Borman, W. C., & Motowidlo, S. M. (1993). Expanding the criterion domain to include elements of contextual performance. Personnel selection in organisations. San Francisco: Jossey-Bass.
- Bryman, A., & Bell, E. (2007). *Business research methods*. New York: Oxford University Press Inc.
- Burger, J.M. (2010). Personality. Wadsworth Publishing: Belmont, CA
- Carsamer, E. (2009). Access To Credit by SMEs in Ghana:Does the type of business matter? Social Science Today. Winneba: Jim Waler Light and Salt Publishers.
- Cochran, W. G., Mosteller, F., & Tukey, J. W. (1954). Principles of sampling. Journal of the American Statistical Association, 49(265), 13-35.
- Cook, C. W., & Hunsaker, P. L. (2001). *The management and organization behaviour* (3rd ed.). New York: McGraw-Hill.

- Costa Jr, P. T., & McCrae, R. R. (1999). Four ways five factors are basic. *Personality and Individual Differences*, *13*(6), 653-665.
- Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. London: Sage Publications Limited.
- Dobronyi, C. R., Oreopoulos, P., & Petronijevic, U. (2017). Goal setting, academic reminders, and college success: A large-scale field experiment (No. w23738). National Bureau of Economic Research.
- Echchakoui, S. (2013). Personality trait and performance: The mediating role of adaptive behaviour in call centres. *American Journal of Industrial and Business Management, 3*, 17-27. Retrieved from http://dx.doi.org/10.4236/ajibm.2013.31003.
- Ekpenyong, D. B., & Nyong, M. O. (1992). Small and medium scale enterprises in Nigeria: The characteristics, problems and sources of finance. Kenya, Nairobi: Zakuma Printers Ltd.
- Elbeltagi, I., Al Sharji, Y., Hardake, G., & Else-touhi. (2013). The role of the owner-manager in SMEs' adoption of information and communication technology in the United Arab Emirates. *Journal of Global information Mgt 21*(2), 23-50. Retrieved from http://doi:10.4018/jgim.2013040102
- Evans, M., Hastings, N., & Peacock, B. (2000). Bernoulli distribution.
  Statistical distributions (3rd ed.). (pp. 31–33). Wiley, New York.
  Everitt, B. L. (1980) Ecology of saltcedar a plea for research.
  Environmental Geology, 3, 77–84.
- Ferreira, M. F., & Nascimento, E. D. (2016). Relationship between personality trait and counterproductive work behaviours. *Psico-USF, Bragança*

*Paulista,* 21(3), 677-685. Retrieved from http://dx.doi.org/10.1590/1413-82712016210319.

- Gareth, M. (2003). *Contemporary management*. New York, American: McGraw-Hill.
- Garson, G. D. (2012). *Testing statistical assumptions*. Asheboro, NC: Statistical Associates Publishing. Retrieved from https://scholar.google.com/scholar?hl=en&as\_sdt=0%2C5&q=Garson %2C+G.+D.+%282012%29.+Testing+statistical+assumptions.+Retrie ved+from+http%3A%2F%2Fwww.statisticalassociates.com%2Fassum ptions.pdf&btnG=.
- Ghana Statistical Service (2010). Takoradi Metropolitan Assembly 2010 Population and Housing Census Analytical report.
- Ghani, N. M. A., Yunus, N. S. N. M., & Bahry, N. S. (2016). Leader's personality trait and employees job performance in public sector, Putrajaya. *Procedia Economics and Finance*, 37, 46 51. Retrieved from www.sciencedirect.com.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26-42.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In: I. Mervielde, I. Deary, F. De Fruyt & F. Ostendorf (Eds.), *Personality psychology in Europe* (pp. 7-28). Tilburg: Tilburg University Press.
- Grace-Martin, K. (2008). Can Likert scale data ever be continuous. Article Alley.

- Hunter, G. K., & Perreault, W. D. (2006). Sales technology orientation, information effectiveness, and sales performance. *Journal of Personal Selling and Sales Management*, 26(2), 95-113. Retrieved from http://doi:10.2753/PSS0885-3134260201.
- Inyang, B. J., & Akaegbu, J. B. (2014). Redefining the role of the human resource professional (HRP) in the Nigerian public service for enhanced performance. *International Journal of Business* Administration, 5(1), 90-98.
- Isaga, N. (2014). Owner-Managers' Demographic Characteristics and the Growth of Tanzanian Small and Medium Enterprises. *International Journal of Business and Management; Vol.* 10, No. 5, 168-176
- John, O. P., Donahue, E., & Kentle, R. (1990). "The Big five". Factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In A. P. Lawrence & P. J. Oliver (Eds.), *Handbook of personality: Theory and research*, (pp. 66-100).
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big five trait taxonomy. *Handbook of personality: Theory and research*, *3*(2), 114-158.
- Kanbontaa, D. A. (2016). The effects of rural enterprise development programmes on micro and small enterprises growth in Ejura Sekyeredumase Municipality in Ghana. Unpublished master's thesis, Department of Marketing and Corporate Strategy, School of Business, College of Arts and Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

- Katsaros, K. K., Tsirikas, A. N., & Nicolaidis, C. S. (2015). Firm performance: The role of CEOs' emotional and cognitive characteristics. *International Journal of Business and Economic Sciences Applied Research*, 8(1), 51-81.
- Khuong, M. N., Linh, L. T. M., Toan, N. Q., Phuong, N. T. M. (2016). The effect of personality and communication skills on employee job performance at multi-national companies in Ho Chi Minh City, Vietam. *Journal of Economics, Business and Management, 4*(4), 296-302.
- Krejcie, R. V., & Morgan, D. W. (1970). Table for determining sample size from a given population Educ. *Psychol. Meas*, 30, 607-10.
- Lee, K., & Allen, N. J. (2002). Organisational citizenship behaviour and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131-142.
- Leephaijaroen, S. (2016). Effect of big-five personality trait and organisational commitments on organisational citizenship behaviour of support staff at Ubon Ratchahani Rajabhat University, Thailand. *Kasetsart Journal of Social Sciences, 37,* 104-111. Retrieved from http://www.elsevier.com/locate/kjss.
- Malhotra, N. K. (1996). *Marketing research: An applied orientation* (2nd ed.). NJ: Simon & Schuster.
- Mensah, S. (2004). A review of SME financing schemes in Ghana. UNIDO Regional Workshop of Financing SMEs, 15-16 March, Accra.

- Mogaji, A. A. (2014). Goal-setting and task performance among nigerian managers in a cross-cultural context. *Toward Sustainable Development through Nurturing Diversity*, 238-305.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied psychology*, 79(4), 475.
- Mullins, F., Brandes, P., & Dharwadkar, R. (2016). To thine shareholders be true? Linking large corporate ownership to firms' use of commitment human resource practices. *Human Resource Management*, 55(4), 567-589.
- Neubert, S.P. (2004). *The Five-Factor Model of Personality in the Workplace*. Retrieved from www.personalityresearch.org/papers/neubert.html
- Nkpaah, M. S. (2016). The effect of business plans on business performance a case of selected SMEs in Ghana. Unpublished master's thesis, Department of Marketing and Corporate Strategy, School of Business, College of Arts and Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Nwandinigwe, I. P. (2005). Fundamentals of research methods and statistics. Lagos: Sibon Books Limited.
- Nye, J., Orel, E., & Kochergina, E. (2013). Big five personality traits and academic performance in Russian universities (BRP Working Paper No. 10). Russia: Basic Research Program. Retrieved from https://publications.hse.ru/preprints/83166256.
- Ocloo, C. E., Akaba, S., & Worwui-Brown, D. K. (2014). Globalization and competitiveness: Challenges of small and medium enterprises (SMEs)

in Accra, Ghana. International Journal of Business and Social Science, 5(4), 287-296.

- Ongore, O. (2013). A study of relationship between personality trait and job engagement. *Procedia-Social and Behavioural Science*, *141*, 1315-1319. Retrieved from http://www.sciencedirect.com.
- Oppong, M., Owiredu, A., & Churchill, R. Q. (2014). Micro and small scale enterprises development in Ghana. *European Journal of Accounting Auditing and Finance Research*, 2(6), 84-97.
- Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS version 15. New York, NY: McGraw-Hill.
- Patki, S. M., & Abhyankar, S. C. (2016). Big five personality factors as predictors of organisational citizenship behaviour: A complex interplay. *The International Journal of India Psychology*, 3(2), 136-146. Retrieved from http://www.ijip.in.
- Patterson, M. G., West, M. A., Lawthom, R., & Nickell, S. (1997). Impact of people management practices on business performance (pp. vii-viii).
   London: Institute of Personnel and Development.
- Pushpakumari M. D. (2009). Entrepreneurial orientation and business performance of small and medium scale enterprises of Western Province in Sri Lanka. Department of Business Administration Faculty of Management Studies and Commerce University of Sri Jayewardenepura.
- Ranwala R. S., & Dissanayake D. M. N. S. W. (2016). Big Five Personality Traits and Entrepreneurial Inclination: A Study Based on Sri Lankan

Undergraduates. *Social and Basic Science Research Review Volume* 4, Issue 4 April, 2016 Pages: 84-98

Ringle, C. M., Wende, S., & Becker, J. (2015). *SmartPLS 3*. Bönningstedt: SmartPLS GmbH. Retrieved from http://www.smartpls.com.

Roussel, P., Durrieu, F., Campoy, E., & El-Akremi, A. (2002). *Méthodes d'équations structurelles: Recherches et application en gestion*. Paris, Economica.

- Rose, R. C., Ramalu, S. S., Uli, J. & Kumar, N. (2010). Expatriate performance In Overseas Assignments: The Role Of Big Five Personality. *Asian Social Science*, 6(9), 104-109
- Rubin, A., & Babbie, E. (2001). Research methods for social work. New York: Macmillan Publishers Ltd.
- Salkind, N. J. (2014). *100 Questions (and answers) about statistics* (3<sup>rd</sup> ed.). California: SAGE Publications.
- Sawyerr, O. O., Srinivas, S., & Wang, S. (2009). Call centre employee personality factors and service performance. *Journal of Services Marketing*, 23(5), 301-317. Retrieved from http://doi:10.1108/08876040910973413.
- Seng, C. C., Theng, C. S., Ling, L. S., Siang, T. T., & Yean, W. B. (2013). The effect of big five personality on job performance: Job autonomy as the moderator. UNITAR Theses.
- Soegoto, E. S., Indiyati, D., & Marhaliyyah, S. A. (2017). The effect of "The Big Five Model" personality on employee's performance at aviation manufacturing. *Journal of Engineering and Applied Sciences*, 12(2), 253-258.

Soper, D. S. (2010). The free statistics calculators website. Online software.

- Spiro, R. L., & Weitz, B. A. (1990). Adaptive selling: Conceptualization, measurement, and nomological validity. *Journal of Marketing Research*, 27(1), 61-69.
- Waheed, A., Yang, J., & Wobber, J. (2017). The effect of personality trait on sales performance: An empirical investigation to test the five-factor model (FFM) in Pakistan. *Interdisciplinary Journal of Information, Knowledge and Management, 12*, 139-157. Retrieved from http://www.informingscience.org/Publications/3710.
- Williams, M. N., Grajales, C. A. G., & Kurkiewicz, D. (2013). Assumptions of multiple regression: Correcting two misconceptions. *Practical Assessment, Research and Evaluation, 18*(11), 1-14. Retrieved from https://mro.massey.ac.nz/bitstream/handle/10179/9469/getvn.asp.pdf?s equence=1.
- Yeboah, M. A. (2014). Analysis of entrepreneurship: How does culture influence risk-taking in smes in the Sekondi-Takoradi Metropolis, Ghana? American International Journal of Contemporary Research, 4(2), 131-140.
- Zhang, M & Wei, J. (2011). Eastern Ways of Thinking: Relationships with Cognitive, Motivational and Personality Variables. *Ambiguity and Decision Making in Chinese Organisation*, 1-27.

#### APPENDIX

Appendix A: Questionnaire for owner-managers in SMEs



EFFECT OF THE BIG FIVE PERSONALITY TRAIT ON JOB PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN TAKORADI METROPOLIS

Dear Respondent,

I am writing to ask for your help with my research on the Effect of the Big Five Personality Trait on Job Performance in Small and Medium Enterprises in Takoradi Metropolis. I would be grateful if you could spare about 30 minutes to answer a few questions on this research. Participation is voluntary. In the event that anything is published from this research, no information supplied will be identifiable to you since only aggregated data will be reported in this study. It is expected that the findings of this research will have implications for economic development, policy formulation and programme support for small and medium enterprises particularly in Takoradi Metropolis

Metropolis.

## NOBIS

Thank you for your valuable time and input.

# QUESTIONNAIRE

# **Section A: Demographic Characteristics**

A01. Age [years]: .....

A02. Sex: a. Male [ ] b. Female [ ]

A03. Highest educational qualification: a. No education [] b. Basic []

c. Secondary/Technical [] d. Tertiary []

e. other(s), please specify.....

A04. Type of business (e.g. manufacturing, trading etc.)

# Section B: The Big Five Personality Trait Dimensions

This section seeks data on the Big Five Personality Trait dimensions used in this study.

*Extraversion:* Extraversion refers to the extent to which a person is sociable, talkative, lively, active, and excitable. Kindly indicate the extent to which you agree with the following statement regarding extraversion.

Please indicate your level of agreement from 1=least agreement to 7= highest agreement with each of the statements by **circling** the appropriate number.

B01	I talk to a lot of different people.	1	2	3	4	5	6	7
B02	I do not mind being the centre of attraction.	6	2	3	4	5	6	7
B03	I am the life of the party.	1	2	3	4	5	6	7
B04	I feel comfortable around people.	1	2	3	4	5	6	7
B05	I start conversations.	1	2	3	4	5	6	7

*Conscientiousness:* Conscientiousness is the degree to which a person shows responsibility, achievement orientation, dependability and perseverance. Kindly indicate the extent to which you agree with the following statement regarding conscientiousness.

Please indicate your level of agreement from **1**=least agreement to **7**=highest agreement with each of the statements by **circling** the appropriate number.

B06	I am always prepared.	1	2	3	4	5	6	7
B07	I pay attention to details.	1	2	3	4	5	6	7
B08	I get chores done right away.	1	2	3	4	5	6	7
B09	I like order.	1	2	3	4	5	6	7
B10	I follow a schedule.	1	2	3	4	5	6	7
B11	I am exiting in my work.	1	2	3	4	5	6	7

*Openness to Experience:* Openness to experience refers to the degree to which someone is creative, thoughtful, open to new experience and curious. Kindly indicate the extent to which you agree or disagree with the following statement regarding openness to experience.

Please indicate your level of agreement from **1**=least agreement to **7**=highest agreements with each of the statements by **circling** the appropriate number.

B12	I have excellent ideas.	1	2	3	4	5	6	7
B13	I am quick to understand things.	1	2	3	4	5	6	7
B14	I use difficult words.	1	2	3	4	5	6	7
B15	I am full of ideas.	1	2	3	4	5	6	7

*Neuroticism:* Neuroticism has to do with an individual's ability to adjust to emotional stability. It deals with one's tendency to experience a variety of disruptive emotions and thoughts. Kindly indicate the extent to which you agree or disagree with the following statement regarding neuroticism.

Please indicate your level of agreement from **1**=least agreement to **7**=highest agreement with each of the statements by **circling** the appropriate number.

B16	I get irritated easily.	1	2	3	4	5	6	7
B17	I get stressed out easily.	1	2	3	4	5	6	7
B18	I get upset easily.	1	2	3	4	5	6	7
B19	I have frequent mood swings.	1	2	3	4	5	6	7

Agreeableness: Agreeableness is the degree to which someone shows trust, personal warmth and cooperation. Kindly indicate the extent to which you agree or disagree with the following statement regarding agreeableness.

Please indicate your level of agreement from **1**=least agreement to **7**=highest agreement with each of the statements by **circling** the appropriate number.

B20	I am interested in people.	1	2	3	4	5	6	7
B21	I sympathize with others feeling.	1	2	3	4	5	6	7
B22	I have a soft heart.	1	2	3	4	5	6	7
B23	I take time out for others.	1	2	3	4	5	6	7
B24	I feel others' emotions.	1	2	3	4	5	6	7
B25	I make people feel at ease.	1	2	3	4	5	6	7

# **Section C: Job Performance in SMEs**

This section seeks data on the job performance in SMEs. Job performance is defined as a measure of how efficiently and effectively managers use resources to satisfy customers and achieve organisational goals.

Please indicate your level of agreement from **1**=least agreement to **7**=highest agreement with each of the statements by **circling** the appropriate number.

Over th	ne past two years, our firm							
C01	Has improved customer satisfaction.	1	2	3	4	5	6	7
C02	Has increased productivity (output).	1	2	3	4	5	6	7
C03	Has successfully been increasing its profits.	1	2	3	4	5	6	7
C04	Has decreased customer grievances.	1	2	3	4	5	6	7
C05	Has improved sales volume.	1	2	3	4	5	6	7
C06	Has achieved customer loyalty (repeat purchases).	1	2	3	4	5	6	7

