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When does Employee Creativity Matter? Examining the Antecedents and Contingent Effect of Employee Creativity on Counterproductive Work Behavior

Submitted by

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Abstract

Employee creativity is highlighted in most studies as an important contributing factor to organizational performance for competitive advantage. Emerging studies note that there is a dark side to employee creativity, which erodes its intended benefits. Few studies have investigated this dark side of employee creativity and its effect on employee and organizational performance. The study hypothesized a relationship between employee creativity and Counterproductive Work Behaviour (CWB) moderated by the effect of the antecedent of employee creativity while recognizing its influence on organizational performance. The study relied on a multi-scale probability sampling technique to collect data from 359 employees and their supervisors from the advertising industry in Ghana, and the data were analyzed using the Partial Least Square - Structural Equation Modelling (PLS-SEM). The findings of this study include those antecedents of employee creativity consisting of personal characteristics (role identity, self-efficacy, learning and performance orientation) and supervisory factors (role ambiguity, transformational leadership, achievement orientation, process, and output controls) had varying effects as some enhanced whilst others hindered employee creativity. In general, while the findings reveal employee creativity significantly affects CWB negatively, it is also the case that the antecedents of employee creativity moderated the relationship between employee creativity and CWB to create conditions in which some hinder CWB while others enhance CWB. This study therefore theoretically gives insight into why some antecedents of employee creativity might provide conditions under which enhancing employee creativity will either enhance or hinder CWB and conditions in which hindering employee creativity will either enhance or hinder CWB. This insight is important for managers to know when employee creativity matters to be able to enjoy its benefits while minimizing its negative effects through counterproductive work behaviours.

Keywords: *counterproductive work behaviour, employee creativity, antecedents, performance*

Dedication

This thesis is dedicated to my loving late father, Theodore Apau Anang, who believed in me and gave me a good foundation, my mother who has continued supporting me until now, and my husband, my best cheerleader, who always encourages me and has helped to make this a reality.

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levels of my life who believed in me, cheered me on, and helped me overcome the stressful times, I say I am most grateful.

Declaration

I, Theodora **Mantebea Mends,** hereby declare that this dissertation is the product of original research conducted by me under the supervision of Professor Kwaku Atuahene-Gima. I also declare that this dissertation has not been submitted to any other Institution for assessment, publication, or any other purpose. Where the works of other people have been used, references have been duly cited. It is in this regard that I declare this work as original. It is hereby presented in partial fulfilment of the requirements for the award of the Doctor of Philosophy Degree in Business Administration at the Nobel International Business School.

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Dr. Hod Anyigba

(Co-Supervisor)

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AAG	- Advertising Association of Ghana
AET	- Affective Events Theory
ARC	- Australian Research Council
AVE	- Average Variance Extracted
CFA	- Confirmatory Factor Analysis
CIP	- Creativity and Innovation Performance
CMBV	- Common Method Bias Variance
CMB	- Common Method Bias
CR	- Composite Reliability
CWB	- Counterproductive Work Behaviour
CWB-I	- Counterproductive Work Behaviour towards the Individual
CWB-O	- Counterproductive Work Behaviour towards the Organization
DV	- Dependent Variable
EFA	- Exploratory Factor Analysis
GOT	- Goal Orientation Theory
HND	- Higher National Diploma
HRM	- Human Resource Management
HMTM	- Heterotrait-Monotrait Ratio
ICT	- Information and Communication Technology
IIPGH	- Institute of ICT Professionals of Ghana
IV	- Independent Variable
OCB	- Organizational Citizenship Behaviour
PLS-SEM	- Partial Least Square Structural Equation Modelling
PR	- Public Relations
SET	- Social Exchange Theory

SEM - Structural Equation Modelling

SSPS - Statistical Package for Social Sciences

TCA - Transaction Cost Analysis

VIF - Variance Inflation Factors

CHAPTER ONE

1.1 Introduction

The chapter provides a general overview of the study and serves as an introduction, which provides the basis for the rest of the chapters in the study. It discusses the background to the study, problem statement, research objectives and questions, contribution of the study to knowledge and practice, significance of the study, definition of terms, and the scope of the study. This chapter finally concludes with an outline of the structure of the study.

1.2 Background of the Study

The world's vibrant and rapidly changing economic situation coupled with fierce competition among organizations makes creativity a highly sought-after requirement for employees in any organization (Amabile, Schatzel, Moneta, & Kramer, 2004; De Strobbeleir, Ashford & Buyens, 2011). This current global competition is such that an organization's reliance on strategies alone is inadequate to meet the complex demands of businesses and the desired outcomes and growth (Gino & Ariely, 2012). Thus, creativity has become a highly sought-after requirement for employees in any organization (Amabile, Schatzel, Moneta, & Kramer, 2004; De Strobbeleir, Ashford & Buyens, 2011). This is because organizations require the generation of novel ideas and creative thinking to develop new processes and products for competitive advantage (Ouakouak & Ouedraogo, 2017; Zhang & Bartol, 2010). Consequently, the past three decades have seen increased research on creativity (Amabile, 1998; Amabile et al., 2004; Mueller & Kamdar, 2011). Most of the literature reviewed show extensive research work on factors leading to creativity and highlights their benefits and importance to the organization's performance and growth (Amabile, 1996; Shalley & Gilson, 2004; Jeong, McLean, McLean, Yoo, & Bartlett, 2017). Some studies for example, guided by the two main theoretical frameworks of organizational creativity (that is, the componential model of employee creativity - Amabile, 1988, 1996, and the interactionist perspective on creativity - Woodman, Sawyer, & Griffin, 1993) have examined the considerable influence of a range of personal and contextual characteristics and their interactions on job-related creativity (Anderson, Potočnik & Zhou, 2014; Amabile, 1996; Madjar, Greenberg & Chen, 2011). Although research in this area has expanded our

understanding of how these characteristics influence creativity, research to compare or contrast the effect of these factors on both creative and routine work, as well as employee work behaviours are relatively limited (Madjar, Greenberg & Chen, 2011).

The development of novel ideas and creative thinking revolves around the creative abilities of the employees of an organization (George, 2007; Jain & Jain, 2017). Consequently, employee creativity is considered as one of the key factors necessary for organizational performance and growth (Amabile, 1996; Anderson, Potočnik, & Zhou, 2014). Employee creativity is defined as the production of novel and useful ideas for organizational products, services, or processes (Zhang & Bartol, 2010). When creative employees are recognized as resources and as agents in the competitive marketplace, then it is important how their creativity can be nurtured for the organization's purpose (Jaskyte & Kisieliene, 2006). This requires knowing the factors that influence employee creativity to create the necessary environment for it to flourish. As a result, an increasing amount of attention has been focused on exploring the antecedents of employee creativity, which is required to generate novel ideas for new products, services, and processes (Anderson, Potočnik & Zhou, 2014; Amabile, Barsade, Mueller, & Staw, 2005; Henker, 2013; Herrmann & Felfe, 2013). Other studies have focused on the circumstances under which employee creativity thrives and the factors contingent on employee creativity (Hirst, van Knippenberg, Chen & Sacramento, 2011; Kouchaki & Desai, 2014; Yeh & Huan, 2016). Most of the scholarly studies reviewed emphasized that employee creativity is essential and a positive force for organizational growth and development (Vincent & Kouchaki, 2015).

Despite the contribution of employee creativity to an organization's productivity and growth, recent studies have indicated that it tends to produce unethical behaviour of employees such as cheating and dishonesty that can have an adverse effect on an organization's performance (Gino & Ariely, 2012; Gino & Wiltermuth, 2014). Such unethical behaviour can lead to a counterproductive work behaviour of employees, which can erode all the positive contributions of employee creativity to an organization's performance and growth (Gupta, Jang, Mednick, & Huber, 2012). Counterproductive work behaviour (CWB) is defined as any conduct exhibited by employees that have the potential to negatively impact an organization's image or performance (Bowling & Eschleman, 2010). Such CWB consists of acts such as theft, cheating and dishonesty, misuse of information, misuse of time and resources, poor attendance, poor quality work, and absenteeism. Creative employees having

a perception of being rare compared to ordinary co-workers are more likely to feel entitled and enact unethical behaviours (Vincent & Kouchaki, 2016). Organizational performance, therefore, suffers when its employees engage in counterproductive work behaviours. Consequently, any possible relationship between employee creativity and CWB creates a paradox such that; while employee creativity contributes to positive outcomes for an organization, it can also lead to CWB of employees that results in negative outcomes with adverse consequences on organizational performance.

Hence, this paradox needs critical consideration because while managers engage in several actions to encourage employee creativity for organizational benefits, its effect on CWB may rather be harming organizational performance and growth. Such a line of inquiry is needed if one is to resolve the paradox to minimize the adverse effects of employee creativity that lead to CWB of employees. Managers should, therefore, be interested to know if what they do to encourage employee creativity does hinder employee performance through counterproductive work behaviours. Otherwise, they might encourage employee creativity while at the same time encouraging its use for CWB, thereby hindering organizational performance.

1.3 Statement of the Problem

Employee creativity is considered as one of such critical factors in organizational sciences with implications for organizational performance (Anderson, Potočnik, & Zhou, 2014). Equally, counterproductive work behaviours such as theft, absenteeism, and poor work attitudes have also been identified as playing a significant role in organizational performance (Bauer & Spector, 2015). Thus, employee creativity and CWB are two important factors with varying effects on organizational outcomes, which have attracted scholarly attention. In the current competitive business world, knowledge-driven economies are the norm and there is intense competitive pressure on organizations for innovative ideas that improve their products and processes (Mumford & Gustafson, 1988; Adler & Chen, 2011). Consequently, rapidly changing work and demand for increased productivity, makes it critical for managers to ensure that employees can meet the requirements of their job (Ouakouak & Ouedraogo, 2017) which makes employee creativity essential for every modern-day organization, desiring to compete effectively in the global economy (Amabile et al., 2004; Jain & Jain, 2017).

Nevertheless, studies on the conceptions of creativity show it is dynamic and complex, changing through experiences, domain knowledge, and socio-cultural contexts (Jain & Jain, 2016; Runco, 2010). Some other scholars have suggested a cross-disciplinary approach to studying creativity, noting the multiplicity of factors that contributes to employee creativity by using various personality, cognitive, social, and other factors (Jain & Jain, 2016; Magyari-Beck, 1994). As a result of this, the vast literature on employee creativity has focused on different theoretical frameworks. The two main frameworks are the componential model of creativity, proposed by Amabile (1996), and the interactionist perspective on creativity proposed by Woodman, Sawyer, & Griffin (1993). These frameworks have guided investigations into the extensive impact of a variety of personal and contextual characteristics such as self-efficacy, role identity, goal orientation, transformational leadership, and role ambiguity and their interactions among work-related creativity in organizations (Amabile, 1996; Anderson, Potočnik & Zhou, 2014). Even though the body of research has extended the understanding of how these characteristics influence creativity, studies again show that these have neglected to compare or contrast the effect of these factors on both creative and routine work (Madjar, Greenberg & Chen, 2011) or employee work behaviours.

According to Vincent and Kouchaki, (2015), a creative identity can cause psychological entitlement, resulting from the fact that creativity is mostly viewed as a rare, valuable attribute, which can increase unethical behaviour such as cheating, dishonesty, and lying for money. Thus, while employee creativity is being promoted as necessary for the development of an organization, emerging literature reveals it can promote the unethical behaviour of employees with contrary effects on organizational productivity and growth (Gino & Wiltermuth, 2014; Runco, 2010). These unethical behaviours can lead to deviance resulting in CWB of employees, which can be detrimental to an organization's performance and growth (Gino & Ariely, 2012; Meier & Spector, 2013). Unethical behaviours of employees that lead to CWB violate an organization's norms with adverse effects on performance and growth. Consequently, although it is accepted that employee creativity may help individuals solve difficult tasks across many domains, it may also lead employees to be unethical, bypassing organizational norms and regulations when searching for solutions for problems and tasks. This shows that creative employees in organizations under some work environments are more likely to use their skills and dexterity to engage in CWB.

The question then arises as to why employee creativity which is beneficial causes counterproductive work behaviour with a negative effect on organizations which is a paradox and what accounts for this apparent paradox? The study again looks at how the moderating effect of the antecedents of employee creativity influence this relationship? Evidence from the literature reveals little empirical research on how this relationship between employee creativity and CWB occurs to support this phenomenon. Thus, across studies, although it has been revealed that there is a relationship between employee creativity and CWB (Harari, Viswesvaran & Zhou, 2016; Ng & Yam, 2019), what causes this relationship and how it affects employee and organizational performance is yet to be fully explored. This study fills this gap by examining the relationship between employee creativity and CWB caused by the moderating role of the antecedents of employee creativity. This is important because while employee creativity contributes to performance and increases productivity, CWB may erode benefits and gains envisaged hence the need to understand and find how this can be resolved.

It is, therefore, necessary to understand why employee creativity, which enhances organizational performance, also affects counterproductive work behaviour. This is due to emerging studies revealing a dark side to employee creativity on the one hand and concerns raised on the negative effect of CWB on organizational performance on the other (Gino & Ariely, 2012; Vincent & Kouchaki, 2015). Indeed, scholarly research has revealed that CWB of employees leads to high economic and social costs for the organizations, as it tends to reduce productivity (Berry, Carpenter & Barratt, 2012; Vardi & Weitz, 2004). For instance, Rahman and Aizzat, (2008) indicated that in Malaysia, the issues of CWB are always discussed in public media, and most of the cases are related to fraud, poor work attitude, tardiness, and misuse of organizational resources. More so, according to Thomas (2012), CWB estimated for serious losses and court cases are responsible for as much as two hundred percent of all business failures in the United States of America. Furthermore, the counterproductive work behaviour of employees is estimated to cost billions of dollars every year due to theft, fraud, and the misuse of the Internet by employees (Latto, 2007; Raman, Sambasivan & Kumar, 2016). The literature however reveals that studies examining deviance and counterproductive work behaviour in non-U.S. work settings are rare because such cases unless they are very serious hardly come into the public domain (Madjar, Oldham, & Pratt, 2002; Schmidt, Roesler, Kusserow & Rau, 2014). Hence, calls to

seek ways to reduce the incidence of CWBs in organizations are rife in scholarly research (Spector & Fox, 2010; Chernyak-Hai & Tziner, 2014).

Regarding Ghana, there have been some studies by Puni, Agyeman, and Asamoah (2016) on leadership styles, employee turnover intentions, and counterproductive work behaviours. They identified some examples of CWBs such as fidgeting with phones instead of working, abuse of the organization's internet by the downloading of Mexican soap operas, pornographic videos, and pictures. Apau and Yobo (2014) also researched organizational cultures and their relationship with CWB but so far there has not been any conscious effort to assess the cost of CWB to organizations in the Ghanaian context. Hence, incidents of CWB among employees have received little research attention. In the case of employee creativity, Arthur (2016) for instance, conducted a study to understand how leadership styles influence employee creativity in Ghana's telecommunication industry and found a positive relationship between authentic leadership style and employee creativity. Another study conducted by Amoah and Mdletshe (2021) tested the moderated mediation model of intrinsic for creativity to explore the effects of intrinsic creativity on employee creativity using 320 supervisor-employee dyads of four educational institutions in Ghana. Although these studies have isolated the factors that influence employee creativity and CWB, none of them have looked at the negative side of employee creativity or its relationship with counterproductive work behaviour or its effect on performance. Hence, this area of research is also under-explored in the context of Ghana and requires attention to provide insight and increase knowledge in employee and organizational work behaviours.

Generally, the antecedents of employee creativity are classified into personal characteristics and contextual factors that vary in their degree of influence in organizations (Zhou & George, 2003; Henker, 2013). Over three decades now, scholars have conducted studies into the personal and contextual factors that interact to affect employee creativity (e.g., Amabile, 1983; Eisenbeiß & Boerner, 2013; Tsai, Horng, Lui & Hu, 2015, Wang, Tsai & Tsai, 2014). Thus, scholarly research has provided a broad and comprehensive review of empirical research on how personal and contextual characteristics, exclusively and interactively influence employee creativity in organizations (Herrmann & Felfe, 2013; Madjar, Greenberg & Chen, 2011; Oldham & Cummings, 1996). Given this, some studies have identified contextual characteristics to include job complexity, relations with supervisors and

coworkers, goals and deadlines, evaluation and reward structures, and the physical work environment (George, 2007; Herrmann & Felfe, 2013).

Although these studies have discussed the relationships between the various antecedents of employee creativity and organizational performance, as yet there is little literature on it having a negative impact on counterproductive work behaviour of employees in organizations, thereby confirming the dark side of employee creativity (e.g., Harari, Reaves & Viswevaran, 2016). In this regard, Gino and Ariely (2012), for example, have called for further research to examine how creativity may lead to different consequences when individuals face ethical dilemmas of behaving dishonestly. Shalley, Zhou, and Oldham (2004) have also proposed future studies to determine if there are negative, unintended consequences of employee creativity that may offset any possible benefits in an organization. Even though some scholars have called for research that addresses the joint or combined effects of personal and contextual factors on employee creativity, very few empirical studies of this type have been conducted (Oldham & Cummings, 1996 citing Amabile & Gryskiewicz, 1987; Staw, 1984; Woodman, Sawyer & Griffin 1993). Besides, work is needed that examines the contributions of personal characteristics and contextual characteristics to this causal relationship between employee creativity leading to adverse outcomes of employee creativity. Consequently, this study seeks to address such gaps in the literature and grant further insight into this phenomenon while also drawing the attention of managers in organizations on the need to know this negative side of employee creativity to be able to determine when creativity matters. In this vein, this study first examines how the effects of some antecedents under personal characteristics (that is role identity, self-efficacy, learning orientation, and performance orientation) and contextual conditions in terms of supervisory factors (that is transformational leadership, role ambiguity, output and process controls, and achievement orientation) contribute to employee creativity and its contingent effect on counterproductive work behaviours in organizations.

1.4 Research Objectives and Questions

The purpose of this study is to determine when creativity matters in an organization given the antecedents and contingent effects of employee creativity on counterproductive work behaviour of employees. It seeks to examine how personal characteristics and contextual factors affecting employee creativity lead to CWB, thereby adversely influencing the

attainment of corporate goals, organizational productivity, and growth. To undertake a very conclusive study, the following objectives are formulated to guide the research effort and inquiry:

a. To examine the personal characteristics and supervisory factors that affect employee creativity
b. To examine the effects of employee creativity on counterproductive work behaviour of employees
c. To examine the moderating role of these personal characteristics and supervisory factors on the relationship between employee creativity and counterproductive work behaviour

To achieve these objectives, the study formulates the following research questions:

a) What is the effect of personal characteristics and supervisory factors on employee creativity?
b) What is the effect of employee creativity on the counterproductive work behaviour of employees?
c) How do personal characteristics and supervisory factors moderate the relationship between employee creativity and counterproductive work behaviour?

1.5 Contributions to Knowledge and Practice

The study contributes to the literature in this field in three major ways. First, the study seeks to extend theories on organizational behaviours and employee creative identity by directing scholars' attention to some factors contributing to employee creativity, which may enhance its effect on counterproductive work behaviour and thereby hinder organizational performance and growth. Although current emerging studies are suggesting a negative side to employee creativity (Gino & Ariely, 2012; Gino & Withermuth, 2014; Vincent & Kouchaki, 2015), this study seeks to relate this negative side of employee creativity to actual work behaviours and outcomes.

Secondly, while in the literature, two main models - componential theory model and interactionist model are utilized separately in explaining the contribution of contextual factors and personal characteristics respectively to employee creativity (Anderson et al., 2014), this study considers the two in an integrative model. Interestingly, Eisenbei and

Boerner (2013) in conducting a study on transformational leadership and individual creativity developed an integrative framework on parallel positive and negative effects of transformational leadership. Even though their research focused on only two aspects of one antecedent transformational leadership, this study will combine more than one antecedent from both personal characteristics and supervisory to explore their effect on employee creativity to add to research in this field.

Lastly, the study elucidates how employee creativity may affect counterproductive work behaviour in organizations by formulating and empirically testing the moderating influence of some personal characteristics and supervisory factors on the relationship between employee creativity and CWB. This study focuses on these two main factors because they are considered essential contributors to this phenomenon of managing employee creativity through an individual's own intrinsic personal characteristics and supervisory factors.

This line of research will advance the literature by enhancing the understanding of four issues.

Notably, this study suggests that while the positive antecedents of employee creativity are also positive moderators of the relationship between employee creativity and CWB, the positive antecedents of employee creativity that are negative are also moderators of the relationship between employee creativity and CWB. Similarly, the negative antecedents of employee creativity are also negative moderators of the relationship between employee creativity and CWB while the negative antecedents of employee creativity that are positive are also moderators of the relationship between employee creativity and counterproductive work behaviour. Thus, this study in addition to discussing the contribution of these contextual factors to employee creativity demonstrates its consequential effect either positively or negatively on the relationship between employee creativity and CWB in organizations. These are critical issues that must be considered to understand better the negative side of employee creativity, and gain insight into how the effects of personal characteristics and contextual factors on employee creativity affect work behaviours, outcomes, and organizational performance.

1.6 Significance of the Study

The findings of this study in addition to giving further insight on the contextual factors that contribute to employee creativity also demonstrated that these factors of employee creativity affect work outcomes as well, which is vital for organizational performance and growth. It also highlighted the need for researchers to further explore the effects of the factors that contribute to employee creativity on organizational performance since their effects may not always be positive. More so, as emerging studies suggest that employee creativity has a negative side, which hinders organizational productivity and growth (Gino & Ariely, 2012; Gino & Wiltermuth, 2014), the results of this study add to research in this area. Additionally, knowing the positive and negative moderating effects of the antecedents, such as the personal characteristics of employee creativity on CWB will enable managers to determine when and how to promote employee creativity. It also provides help and guidance in formulating employee creative development programs to enable the organization to derive the maximum benefits from its creative employees. Practically, relating the antecedents of employee creativity to CWB gives further awareness on the dark side of employee creativity and helps managers in their decision-making processes to manage the creative environments in their organizations. These are critical issues managers of organizations must take note of in their efforts to promote employee creativity to gain the benefits that will enhance productivity.

1.7 Definition of Key Terms

To understand the study topic, this section outlines and defines the essential terms related to the study.

- *Employee creativity*: Employee Creativity is defined as the ability of the employee to generate novel ideas and think innovatively to develop new processes, which is considered an important skill for individuals, society, and organizations (Gino & Ariely, 2012). It enables employees to solve problems effectively as organizations need creative employees to adapt to the current evolving business environments to enable them to succeed in the globally competitive marketplace (Jain & Jain, 2017)
- *Counterproductive work behaviours*: Counterproductive work behaviour (CWB) is defined as certain negative work behaviour exhibited by employees of an organization at the workplace aimed to negatively impact the productivity of that

organization and meant to hurt the organization or other workers of the organization (Roxana, 2013). It includes activities such as avoiding work, doing the task incorrectly, physical aggression, verbal insult, sabotage, and theft. (Spector & Fox, 2002).

- *Personal characteristics:* This consists of general individual attitudes and behaviours across situations (Amabile, 1988; Henker, 2013; Sousa & Coelho, 2011; Tierney & Farmer, 2002). They serve as guiding principles in individuals' lives (Schwartz, 1994) and represent intrinsic beliefs about what is good, desirable, and righteous signifying the preferred beliefs and expectations of how individuals should behave in peculiar circumstances (Suar & Khuntia, 2010).
- *Supervisory factors:* A supervisor, according to Collins English Dictionary, refers to a person who supervises activities or people, especially workers or students. Supervisory factors are a significant component necessary in an organizational context and function and are often considered a strong determinant of employee creativity at work (Anderson, Potočnik & Zhou, 2014; Madjar, Oldman & Pratt, 2002; West & Farr, 1989).
- *Role Ambiguity:* According to Schmidt, Roesler, Kusserow & Rau (2014), role ambiguity refers to the lack of mutual understanding or communication about employee roles in an organization. Rizzo, House & Lirtzman (1970, p. 156) also defined role ambiguity to "reflect certainty about duties, authority, allocation of time, and relationships with others; the clarity or existence of guides, directives, policies; and the ability to predict sanctions as outcomes of behaviour."
- *Role identity:* Role identity is the meaning given to self-attribution concerning the exhibition of a specific role in an organization. (Erkutlu & Chafra, 2015 citing Farmer, Tierney, & Kung-McIntyre, 2003). This is role-consistent behaviour reconciling the view an individual holds of himself or herself consistent with views perceived by others about him or her (Wang, Tsai & Tsai, 2014).
- *Self-efficacy:* Tang & Chang (2010) and Bandura (1978) define self-efficacy as an individual's belief in one's competency to perform a specific task and ability to generate a certain outcome.
- *Transformational leadership:* Transformational leadership is when a leader can elevate followers' values, needs, and competence to a higher level to enable them to perform better at their job (Hermann & Felfe, 2013).

- *Job complexity:* Job complexity refers to when a job provides opportunities for the employee to learn and use a variety of skills, is identifiable, has significant implications for others, and provides autonomy and feedback (Anderson, Potočnik & Zhou, 2014; Hackman & Oldham, 1980; Shalley, Gilson & Blum, 2009).
- *Achievement orientation:* This relates to the confluence of employer or supervisor's and employee's goals, thus showing common values and agreement on objectives (Avery, Simillie & Fife-Schaw, 2015). It also describes the pattern of cognitive actions that result from pursuing various goals (Avery, Simillie & Fife-Schaw, 2015; DeShon & Gillespie, 2005).
- *Process controls:* This refers to the level to which an organization will emphasize procedures and behavioural activities in monitoring, evaluating, and rewarding employees (Crosno & Brown, 2014; Jaworski & MacInnis, 1989).
- *Output control:* This reveals the degree to which a supervisor accentuates procedures and behavioural activities in monitoring, evaluating, and rewarding employees (Anderson & Oliver, 1987, Atuahene-Gima &Li, 2002).
- *Goal orientation:* This is a self-development philosophy, serving as a motivational mechanism, which influences how employees interpret and perform their functions in achievement situations (Elliot & Church, 1997, Anderson, Potočnik & Zhou, 2014). Goal orientation consists of two types, *learning orientation* and *performance orientation*. A learning goal orientation emphasizes the personal development of competence, whereas a performance orientation focuses on showing competence to external observers (Hirst, Van Knippenberg & Zhou, 2009; Gong, Huang & Farh, 2009).

1.8 Scope of Study

To have very conclusive findings, the study focused on organizations in industries that require frequent innovative products to give them a competitive edge and therefore require creativity from their employees. Given this, some organizations considered for the study included telecommunication companies, banking, tourism, and marketing/advertising organizations where creativity is mostly required. The study however focused on the advertising industry in Ghana because even though organizations in this industry require creativity to remain competitive, there is a gap in the literature on employee creativity in the

advertising industry both in Ghana and globally. Several of the studies identified from the literature relied on data from the tourism and hospitality industry (Jaiswal & Dhar, 2015; Tsai et al., 2015; Yeh & Huan, 2016), engineering industry (Liu, Gong, Zhou & Huang, 2017), and manufacturing industry (Oldham & Cummings 1996) globally and in Ghana, telecommunication industry (Arthur, 2016) and educational institutions (Amoah & Mdletse, 2021).

1.9 Structure of Thesis

This study began with an introductory chapter, which consists of Background to the study, Research problem, Objectives of the study, Research questions, Contribution of the research, Significance of the Study, Definition of terms, Scope, and the Structure of the thesis. Chapter two focused on the review of literature relating to the study topic and discussed the underlying theories and other empirical evidence from prior studies. It encompassed the following: the review of relevant study concepts, corresponding related research issues, associated theories, and models development, the presentation of hypothesis, conceptual framework, and a summary. Chapter three is the section on the procedure and methodology for the study. This section showed the methodology adopted to achieve the specific research objectives stated in chapter one. Chapter four is the section, which presents the data collected and analyzed, and the results obtained from the analysis. Lastly, Chapter five discussed the findings of the study, the implications of the study theoretically and practically, and proposed areas for future research and a summary.

CHAPTER TWO

Literature Review

2.1 Introduction

This chapter reviews some critical issues on counterproductive work behaviour and employee creativity and generally provides the structure and basis for carrying out this research. It discusses related inquiries on constructs of the study, presents the theoretical foundations, formulates the research hypothesis and conceptual framework, and ends in a conclusion. It begins with definitions and conceptualization of counterproductive work behaviour and employee creativity from prior literature which is followed by a review of the studies on the antecedents of employee creativity generally and specific to the study. Through discussions, this research presents the theoretical foundation and conceptual framework within which the study is situated and develops and formulates hypotheses. This chapter finally concludes with a summary.

2.2 Discussion of Relevant Concepts

2.2.1 Counterproductive work behaviour

Definition of counterproductive work behaviour

Counterproductive Work Behaviour (CWB) is any intentional conduct that violates significant organizational customs (Lin & Johnson, 2017; Marcus, Taylor, Hastings, Sturm & Weigelt, 2016). This definition spans a wide range of specific acts including theft, substance use, sabotage, withholding effort, interpersonal aggression, and absenteeism. It further corresponds with a variety of similar terminologies used to describe this same set of behaviours studied for decades now such as organizational retaliation behaviour (Skarlicki & Folger, 1992), anti-social behaviour (Giacelone & Greenberg, 1996), and organizational deviance (Robinson & Bennett, 1995,). Others are workplace aggression (Baron & Neuman, 1996), noncompliant behaviour (Puffer, 1987), organizational delinquency (Hogan & Hogan, 1989), incivility (Penny & Spector, 2005), and dysfunctional behaviour (Griffin, O'Leary-Kelly & Collins, 1998). Nevertheless, as noted by Gruys (1999), all the approaches are not restricted to intentional conduct as some, including employee wrongdoing (Moberg, 1997) and organizational delinquency (Hogan & Hogan, 1989) are erratic behaviours that may be personal character flaws but have negative consequences. Even so, no matter its

identification term or name in the literature, counterproductive work behaviour is the focus and term utilized in conducting this research.

Counterproductive work behaviours impede the welfare of an organization or its members and are regarded by organizations as conflicting with their legitimate interests (Bennett & Robinson, 2000; Jawahar & Stone, 2015). Consequently, studies consider CWB a negative aspect of performance in an organization because of its adverse effect on productivity (Rotunda & Sackett, 2002). For decades now, counterproductive work behaviour (CWB) has attracted many studies into its various aspects by organizational scholars (Sackett, 2002; Bowling & Burns, 2015; Spector & Zhou, 2014; Fida, Paciello, Tramontano, Fontaine, Barbarnelli & Farnese, 2014). This interest in CWB is apparently due to the unfortunate role it plays as a common incidence in organizations. It has been found to have a tremendous negative bearing in terms of the level of productivity and turnover (Dalal, 2005; Marcus, Taylor, Hastings, Sturm & Weigelt, 2016; Oh, Guay, Kim, Harold, Lee, Heo & Shin, 2014). It also results in a negative effect on work attitudes and performance (Oh et al., 2014) and work stress (Meier & Spector, 2013; Penny & Spector, 2005).

Primarily, concerns on CWB in organizations are due to the cost organizations incur through these negative employee behaviours, which run into billions of dollars annually (Raman, Sambasivan & Kumar, 2016). Indeed, scholarly research has revealed that CWB of employees leads to high economic and social costs for the organizations as it tends to reduce productivity. For instance, Rahman and Aizzat (2008), indicated that in Malaysia, the issues and costs of CWB always are discussed in public media and most of the cases are related to fraud, poor work attitude, tardiness, and misuse of organizational resources. Besides, Gruys (1999) avers that apart from the direct cost to businesses, other costs like loss of productivity, organizational reputation, and customers may result from employee counterproductive work behaviours. Hence, there is an increase in scholarly studies to gain insight and understanding into the incidence of CWBs in organizations (Spector & Fox, 2010; Chernyak-Hai & Tziner, 2014).

Conceptualization of Counterproductive Work Behaviour

Research into the CWB domain in organizations has been pursued for decades now in a variety of forms and ways. Robinson and Greenberg (1998) for instance conceptualized five characteristics of CWB which are 1) perpetrator, 2) intentionality, 3) target of the behaviour,

4) nature and execution, and 5) consequences of the reaction to situate it within context. Similarly, contemporary literature gives an understanding into diverse settings or classifications of CWB which make a distinction between acts directed at individuals (CWB-I) and at organizations (CWB-O) as postulated by Robinson and Bennett (1995) and Bennett and Robinson (2000). This classification has further enabled scholars to categorize CWB into interpersonal and organizational antecedents (Sackett, 2002). It is evident according to the definitions of CWB that such behaviour, whether interpersonal or organizational, will negatively affect the employees personally and the performance of an organization (Zhao, Peng & Sheard, 2013). In another vein, Bennett and Robinson (2000) developed a hierarchical model which consists of an overall counterproductivity factor at the apex, a sequence of group factors, such as the organizational deviance and interpersonal deviance factors identified underneath this overall factor and particular behaviour domains, such as unexcused absence from work, safety, theft and poor quality work below these group factors. They proposed that scholars and practitioners may emphasize particular levels of this hierarchy for different applications which will lead to interventions being sought to deal effectively with a particular problem behaviour such as reduced quality work output. Additionally, Bennett and Robinson (2000) have suggested four distinct divisions of these behavioural fields such as property deviance, production deviance, interpersonal deviance, and political deviance.

Consistent with prior studies, Spector, Fox, Penney, Bruursema, Goh, and Kessler, (2006) have suggested a five-dimensional model of CWB including abuse, production deviance, theft, sabotage, and withdrawal while a more refined eleven-facet model has been suggested by Gruys and Sackett (2003). This model consists of acts such as stealing and other such behaviours, damage to property, information mismanagement, time and resources misuse, unsafe behaviour, poor attendance, poor-quality work, alcohol use, drug abuse, inappropriate verbal and physical action. This eleven-facet model comes from studies conducted into the dimensionalities of CWB. Thus, studies have addressed constructs on the concept of CWB from different angles based on the five characteristics of perpetrator, intentionality, the target of the behaviour nature and execution, and consequences identified by Robinson and Greenberg (1998). Hence, despite the attention generally gained on CWB, as stated by Marcus et al., (2013, p. 204) ‘although research has begun to address the issue of CWB’s internal structure, and various models proposed in the literature, systematic integration of this research and theorizing is currently lacking’.

Consequently, there is still little consensus on how research classifies the various actions falling within this domain in their relation to each other. Clarifying these issues to gain further insight into CWBs and ascertain the underlying factors that contribute to this behaviour would help to tailor interventions for its management in organizations. In this regard, despite these inadequacies, the factors that lead to employees' counterproductive work behaviour require the necessary attention because of its relation to employees' work attitudes and the performance of an organization.

Apart from the above, research work has also discussed some factors that cause CWB in organizations. Apau & Yobo (2014), for instance, focused their studies on organizational cultures and their relationship to CWB whilst other authors focused on leadership styles and employee turnover intentions (Puni, Agyeman & Asamoah, 2016); organizational citizenship behaviour (Gyekye & Haybatollah, 2015) and the structure of CWB concerning its dimensionality and associations with features of job performance (Sackett, 2002). Furthermore, there are studies on a general perspective on the antecedents of counterproductive behaviour at the workplace (Marcus & Schuler; 2004; Roxana, 2013). Till now, it is noteworthy that the predominant majority of research in this area is dedicated to isolating environmental antecedents of CWB, such as job stressors, workplace incivility, abusive supervision and organizational justice (Eschleman, Bowling, Michel & Burns, 2014; Meier & Spector, 2013; Penny & Spector, 2005) found to have relationships with CWBs. Others have identified personality traits which include negative affectivity, Machiavellianism, narcissism, and psychopathy that may heighten an individual's propensity to engage in CWB (O'Boyle, Forsyth, Banks & McDaniel, 2012). Even though researchers agree on an interactionist perspective as regards the influence of both person and environment precursors in predicting CWB (Penny & Spector, 2005), there is no study yet relating these antecedents to an essential impact on organizational performance such as employee creativity.

Despite the negativity associated with CWBs, emerging studies are beginning to reveal a relationship between counterproductive work behaviour (CWB) and Organizational Citizenship Behaviour (OCB) in some circumstances (Ariani, 2013). OCB is defined as defending the criticism of the organization, promoting the organization, or influencing colleagues to invest in the organization and are behaviours that impact positively on the

organization or its performance (Poncheri, 2006). Although studies conducted in times past posited CWB and OCB as different forms of active behaviour, there is evidence that in some circumstances, engaging in CWB can lead to some OCB which positively impacts organizational performance (Spector & Fox, 2010). Again, Spector and Fox (2010) questioned the common proposition that acts of CWB and COB are negatively related. In their study, they found that five potential antecedents of extra-task behaviours, lack of stimulation at work, organizational restrictions, coworker underperformance, the absence of expected rewards, and remorse over past actions can result in both CWB and OCB. Further research in this area is, however, necessary to accentuate this proposition.

Generally, even though several types of research have been carried out on CWB in organizations, considering the prevalence of CWB and the critical role it plays in organizational performance, more research is explicitly required to identify the triggers or perpetrators to enable managers to deal with it effectively. In this consideration, the study suggests that the antecedents of employee creativity may serve as a predictor of CWB in organizations. The study considers CWBs that are targeted at organizations rather than individuals. It will include CWBs such as time and resources mismanagement, poor attendance, and poor work quality out of the whole spectrum of behaviours determined in previous studies to examine this relationship.

2.2.2 Employee Creativity

Definition of Employee Creativity

The notion of employee creativity is the ability to generate unfamiliar new and appropriate (i.e., valuable, adaptive to task constraints; Amabile, 1988) ideas and think innovatively to develop new processes and products (Gino & Ariely, p. 445, 2012). This definition broadly ranges from designing a new product to producing a better way of carrying out an activity in an organization. It may involve a re-organization of existing resources or a more efficient process of performing a function with no significant additional cost to an organization yet still yield maximum results, increase product quality, or possibly reduce production cost. In this regard, employee creativity that results in creating new knowledge or products signifies a dramatic aspect of organizational progress and is of great benefit to both individuals and organizations as it forms a key component of human capital (Jain & Jain, 2017). Similarly,

according to Yeh & Huan (2017, p.120), "operational definitions of creativity can range from simply assembling a product to conceptualizing and realizing an entirely new product."
In another disposition, Eisenbeiß and Boerner (2013) have referred to creativity as producing new and useful ideas by a person, also taken as the idea development element of innovation (Anderson, Potočnik & Zhou, 2014). This reference shows that some prior research on creativity has related creativity to innovation since it includes developing and implementing novel ideas. In these instances, creativity often is considered as the foremost stage of the innovation process (Amabile, 1988; Anderson, de Dreu & Nijstad, 2004). Creativity and innovation are however distinct concepts even though most scholars reserve a significant role for creativity as it provides initial ideas that may eventually result in innovations and help stem the challenges arising during implementation. Yet still, creativity signifies specifically the idea generation, while innovation signifies idea generation and execution (Anderson, Potočnik & Zhou, 2014). Hence, although creativity and innovation are related constructs, they are not in a way identical. Recent integrative reviews have therefore distinguished creativity, an idea generation process from innovation which is the process of implementing ideas (Anderson, Potočnik, & Zhou, 2014). Consequently, this research focuses on employee creativity, as individual behaviours to produce novel and valuable ideas, methods, and outcomes.

Notably, employee creativity varies in terms of scope or variety depending on the individual's value-creating potential or capability (George, 2007) and therefore occurs in various organizations. Thus, examples of creativity are not limited to industries such as entertainment, fashion, or technology. Creativity can take the form of a scientist developing a new drug or a teacher developing a novel approach to teaching to improve students' interest in a subject and learning a skill to minimize exam failures. Thus, according to Füller, Hutter, and Faullant (2011), the operational meaning of employee creativity ranges from basically putting together a product to conception and realization, or developing an entirely new product or process. This definition deviates from the rather narrow focus on industries solely offering intellectual products such as gaming design and new technology (Hotho & Champion, 2011). Consequently, from literature discussed on definitions of employee creativity, this research defines it simply as an act that serves to generate new, unusual and useful ideas for an organization's services, products, and or processes (Zhang & Bartol, 2010). This definition considers employee creativity as one of the critical drivers of performance and growth in an organization and therefore necessitates its management.

Types of Employee Creativity

Although as discussed earlier, creativity is considered under different terminologies such as employee creativity and individual creativity, these refer primarily to creativity as distinct to a person used in a different context in various studies. Other prior studies have also considered creativity in organizations in terms of organizational creativity and team creativity (Hülsheger, Anderson & Sagaldo, 2009; Rosing, Frese & Bausch, 2011**)** to explain further its role in organizational performance. Similarly, Madjar, Greenberg & Chen (2011) suggested other types of creativity widening further the range of possibilities into incremental creativity and radical creativity which have the potential to contribute positively to performance outcomes. Previous studies had distinguished innovation into two types: radical and incremental (Chang, Gong & Shum, 2011). Thus, viewing creativity as the first stage for innovation, they extended this similarity in distinguishing these two types of creativity. They defined radical or divergent creativity as original ideas significantly different from the prevailing practices of an organization and postulated that new and set-breaking frameworks or processes would result from such profoundly radical ideas. In the case of incremental or adaptive ideas, they defined it as making a few changes in the composition of a product or offering only minor variations to existing practices and products. For instance, they posited that some typical illustrations of incremental ideas are varying a current print flyer to be presented in an electronic form or using the same model and concept for shoe advertising to advertise stationery. The results of their study concluded that inclination to take risks, resources to enhance creativity, and commitment to one's career are associated primarily with radical creativity while incremental creativity is associated with working in the presence of creative coworkers and organizational identification. These distinctions they again proposed do not suggest that one type of creativity whether radical or incremental is inferior, better, or more valuable than the other. More so, what factors influence the interpretation of the situation and its requirements in a choice of a type of creativity whether incremental or radical may be different (Ford, 1996; Madjar, Greenberg & Chen, 2011; Unsworth & Clegg, 2010). Their study was limited to the extent that it was conducted only in advertising agencies, where creativity is expected and recognized. This study, therefore, facilitated the differentiation of the three dimensions of performance relating to radical creativity, incremental creativity, and routine noncreative work which indicates that the generalizability of the results of their study in other industries may be

uncertain. Thus, although these types of employee creativity have been shown to exist, they are not incorporated into this study because consideration is not given to them as a significant part of this study.

Characteristics and Importance of Employee Creativity

While creativity enables individuals to solve problems effectively through the production of novel and useful ideas; it is essential relating these ideas to the organization's business such as new products or new procedures to the organization itself (Anderson, Potočnik, & Zhou, 2014). Some authors, Guilford (1967) and Runco (2010) have said that being creative entails thinking outside the box which must involve divergent thinking. On the other hand, according to Brenkert (2009), the process of creativity involves rule-breaking, as rules must be broken to take advantage of existing opportunities or to produce new ones. Consequently, scholars have averred that the ability to generate a creative result requires the determination to face organizational and environmental challenges (Mittal & Dhar, 2015). This peculiar nature of creativity has resulted in diverse approaches to its relevant literature over the years limiting an organized theoretical understanding of how employee creativity operates and affects an organization (Jain & Jain, 2017). In this regard, Magyari-Beck (1994) for instance suggests a cross-disciplinary approach to study creativity through various personality, cognitive, social, and other factors according to which multiplicity of factors contributing to employee creativity may be considered rather than a single view.

Similarly, Csikszentmihályi (1990, p. 199) reasoned that "creativity is not an attribute of individuals but social systems making judgments about individuals." He conceptualizes a dynamic model using a systemic view with creativity being the result of the interaction between three subsystems: a domain, a field, and a person. While the domain involves a set of representative directions and techniques, the field takes account of all the individuals who play the role of gatekeepers to the domain and the individual, a person. Consequently, Woodman, Sawyer & Griffin (1993) proposed an interactionist model, in which they incorporate five constructs as a subcategory of a social context such as (i) the creative process, (ii) the creative product, (iii) the creative person, (iv) the creative situation and (v) the interrelation among each of these components. On the other hand, Simonton (1984) averred that the efficacious social psychology of creativity requires that a creative person is placed within a system of interactive relationships. The employee creativity concept has further been discussed by Zhang and Bartol (2010) who posited a reversed U-shaped relation between creative process engagement and overall job performance (a moderate level of

creative engagement facilitated by overall job performance). Again according to Zhang & Bartol (2010), the creative process comprises three phases involving the first phase of the identification of the problem, the second phase being the exploration and encoding of relevant information, and the last phase which is the production of new ideas. All these studies in effect show that the conceptions of creativity are dynamic and complex and change through experiences, domain knowledge, and socio-cultural contexts; hence the divergence in this field (Jain & Jain, 2017). It should be noted however that studies show each of these approaches has some other limitations, which can be complemented by another to some extent, thereby advancing research in this field. In this regard, this study in considering these approaches settles on an appropriate one suitable for achieving its purposes since a multiplicity of contextual factors contributing to employee creativity and its contingent effect on CWB will be examined.

Additionally, the importance of creativity for individuals, organizations, and societies has increasingly been highlighted by the number of studies in the past three decades (George, 2007; Gupta, Singh & Khatri, 2013; Zhang & Bartol, 2010) with many emphasizing the potentials of creative thinking salient benefits. Research has for instance shown that creative products generate results that are average and considerably higher than that of "common" products (Horibe, 2001) while investments in creativity and innovation positively influence organizational performance (Gino & Ariely, 2012). This view supports the fact that creativity and innovation required in the dynamic, competitive environment of many organizations are important variables in the organizational sciences which has implications for firm performance (Anderson, Potočnik, & Zhou, 2014). Thus, as a result of this importance and relevance of employee creativity, some studies have encouraged its promotion in technological, tourism and hospitality industries (Eisenbeiß & Boerner, 2013; Horng, Chou, Liu, & Tsai, 2013; Tsai, Horng, Liu & Lu, 2015). These studies considered various antecedents and conditions under which creativity occurs and must be encouraged in organizations.

Consequently, while the roles of creativity and innovation are relevant as determining factors of organizational performance presenting different products and services into the marketplace, their importance is spread widely across industries and organizations (Harari, Reaves & Viswesvaran, 2016). Indeed, developing or modifying products, methods, or techniques across work environments potentially acts to improve competencies and enhance

operational outcomes. Hence, creativity and innovation are needful for the effectiveness of most organizations and industries (Herrmann & Felfe, 2013). Employee creativity is therefore of great benefit to both individuals and organizations as it forms a key component of human capital (Jain & Jain, 2017), which is considered an important skill for individuals, society, and organizations (Gino & Ariely, 2012). Scholars have, in this regard, touted the importance of employee creativity and advocated its promotion in organizations to enhance performance and growth, to enable them to gain an advantage over their competitors (Gilson, Lim, Luciano & Choi, 2013; Herrmann & Felfe, 2013). Similarly, due to the advantages that encouraging employee creativity brings to organizations, research has studied various ways to increase employee creativity (Mueller & Kamdar, 2011; Vincent & Kouchaki, 2015).

Given this role played in organizations, most scholars and practitioners viewed employee creativity as an important source of organizational innovation and considered it a must for contemporary organizations (Ouakouak & Ouedraogo, 2017). Thus to attain a competitive advantage in the current global economy, organizations should and must actively engage in promoting employee creativity to generate new and innovative ideas (Vincent & Kouachaki, 2015). Incidentally, there is a strong normative bias towards research into employee creativity as a salient feature in organizational outcomes (Chi & Pan, 2012; Mittal & Dhar, 2015). Previous literature has therefore advocated for its promotion in organizations to place them above their competitors (Zhang & Bartol, 2010; Harari, Reaves & Viswesvaran, 2016). According to Montag, Maertz, and Baer (2012), a conducted McKinsey Global Survey revealed that 70% of business managers indicated that accessing new ideas is an important priority for driving strong growth. As a result, attention on this topic among organizational scholars has increased over the past few decades considering this growing number of executives who make creativity a priority. Research on employee creativity is growing at such a pace that scholarly research on creativity in organizations, the subject of this review, is burgeoning (Carmeli, Gelbard, & Reiter-Palmon, 2013; Montag, Maertz & Baer, 2012). Hence, increasingly, creativity is being recognized as a necessary skill for the 21st-century organizations seeking to grow, as concerns about economic revitalization and applications of diverse abilities attract public interest (Miller & Dumford, 2014). Despite, however, the advocacy for promoting employee creativity due to its importance in organizations, emerging studies in the field are beginning to reveal that it has a negative side which is subsequently discussed.

The Dark Side of Employee Creativity

Indeed, recent studies have found that employees occupying positions requiring creativity are more likely to be flexible morally and indulge in unethical conduct in an organization (Gino & Ariely, 2012). Gino and Ariely (2012), in a study, have pointed out the possibility that creativity may not always lead to a positive output or benefit, as it is likely to have a dark side when it leads to unethical behaviour. They have hypothesized that "creativity promotes dishonesty by increasing people's ability to self-justify their bad deeds" (Gino & Ariely, p.447, 2012). Similarly, current studies conducted have explored further whether there is a dependable, positive relationship between creativity and unethical behaviour such as dishonesty, cheating, and other counterproductive work behaviours (Gino & Wiltermuth, 2014; Shon, 2006; Vincent & Kouchaki, 2015). Such studies have found emerging evidence of employee creativity having a negative side that adversely affects organizational output (Gino & Ariely, 2012; Ayal & Gino, 2011; Shu, Gino & Bazerman, 2011).

Given that both dishonesty and creativity involve rule-breaking, another way in which employee creativity can have an adverse side is when it leads to dishonesty and cheating. Thus, some scholars have averred that organizations, which encourage people to be slow to learn the organizational norms, may nurture creativity (Gino & Wiltermuth, 2014). Meanwhile, such organizations may be at the same time encouraging such employees to break from accepted practices (Winslow & Solomon, 1993) or break the rules (Baucus, Norton, Baucus, & Human, 2008). Gino & Wiltermuth (2014) propose that employees who most certainly behave dishonestly and employees who most certainly are creative may be the same. Indeed, very creative employees are more likely than less creative employees to bend the rules, or break laws, or bypass organizational rules (Sternberg & Lubart, 1995; Sulloway, 1996). Similarly, creative persons may be more adept at thinking of more and varied ways to benefit from favors and financial gains from cheating or bypassing regulations (Shon, 2006). This may result in a CWB, such as an employee giving an excuse that a creative venture requiring inputs from outside the office for the organization, is causing absenteeism and demands for more resources from the workplace when in fact the time and resources are spent on personal pursuits.

Vincent & Kouchaki, (2016) in their recent study, for instance, highlighted this view by suggesting that employee creativity in some situations leads to entitlements and unethical behaviours. It must also be noted that individuals who feel entitled are more likely to break

the rules and make unethical decisions (Burt, Donnellan & Tackett, 2012; Tamborski, Brown & Chowning, 2012). This entitlement arises because employees must sometimes defy convention and conformity to be creative (Gupta, Jang, Mednick, & Huber, 2012) which may at the same time be unethical or counterproductive. Thus, while creative employees may be contributing novelty in processes and products, and solutions, they may feel entitled to preferential treatment due to the rarity inherently related to creativity which is a perceived value placed on creativity by organizations and society (Vincent & Kouchaki, 2017). This sense of entitlement may have its own set of behavioural outcomes, including dishonesty which negatively affects organizational performance. Thus, while most work environments are rapidly changing which makes it critical for managers to expend every effort to ensure employees can meet the required creativity of their job functions without any hindrance, creativity is used by employees to justify their behaviours which can sometimes be unethical and counterproductive (Jain & Jain, 2017). It must, therefore, be noted that while the positive side of employee creativity has been widely studied, the negative side has not received much attention and is under-theorized (Gino & Wiltermuth, 2014). The few studies conducted have however found that creativity plays a role in dishonest behaviours (Gino & Wiltermuth, 2014; Gino & Ariely, 2012) which subsequently leads to some CWB such as cheating, misuse of resources, and pilfering in organizations. This study, therefore, answers calls for more research into the negative side of employee creativity by examining its antecedents and contingent effect on CWBs, an important factor in organizational performance.

2.3 Theoretical Foundations

The vast literature on the factors that contribute to employee creativity has been conducted with different theoretical bases. The two principal theoretical frameworks of organizational creativity, the componential model of creativity, proposed by Amabile (1996) and the interactionist perspective on creativity also proposed by Woodman, Sawyer, & Griffin (1993) have been used to conduct many studies in this field. These have guided investigations into the extensive influence of a variety of personal and contextual characteristics and their interactions among work-related creativity in organizations (Amabile, 1996; Anderson, Potočnik & Zhou, 2014). Even though the body of research has extended the understanding of how these characteristics affect creativity, studies again note that these have not been able to show the various effects of these factors on both creative and

routine work (Madjar, Greenberg & Chen, 2011). The study discusses these theories subsequently.

2.3.1 Componential Theory

The most important principle of the componential theory is that work environments have an influence on creativity by affecting constituents that contribute to creativity, which represents a basic source for organizational innovation and advancement (Amabile, 1997; Anderson, Potočnik & Zhou, 2014). Three major components within the theory have been found to contribute to an individual employee or small team's creativity in terms of expertise, creative-thinking skill, and intrinsic motivation. Similarly, the more extensive work environment has other components that influence employee creativity being organizational motivation to innovate, resources (finances, time availability, and personnel resources), evaluation and reward structures, job complexity, goals and deadlines, relations with supervisors and coworkers, and the physical work environment (Herrmann & Felfe, 2013). A dominant feature of this theory is that an employee should possess a considerable level of knowledge about a domain, job, or task to be creative (Gilson, Lim, Luciano & Choi, 2013). They must also possess domain-relevant abilities, which means they should understand the methods and procedures required to complete their work. This theory has received recognition and some empirical support about the role of its motivation component as a psychological mechanism among scholars. Thus, the motivation component has been suggested to be fundamental to factors such as supervisory encouragement (leadership) influencing the work environment on employees' creativity and has therefore received much research attention unlike the other components (Shalley, Zhou & Oldham 2004; Zhou & Shalley, 2011).

2.3.2 Interactional Theory

On the other hand, the interactionist perspective of organizational creativity (Woodman, Sawyer & Griffin, 1993) emphasizes the definition of creativity to be a complicated interaction between the individual employee and the circumstances surrounding the work within different levels of the organization. In suggesting the interactionist model, Woodman, Sawyer & Griffin (1993) also postulated an integration of five constructs as a subcategory

within the social setting, which are the creative product, the creative process, the creative person, the creative situation, and the manner of interaction amongst each of these components. Despite this, Simonton (1984, p. 1273) averred that successful social psychology of creativity requires that the creative individual is placed within a network of interpersonal relationships. Similarly, Chen, Chang, and Hung (2008) found that social interaction and network ties have a significant and positive impact on creativity.

Additionally, scholars have found employee creativity at any level to be the consequence of antecedent conditions (factual variables), cognitive style and ability (divergent thinking), personality (self-esteem, self-efficacy), relevant knowledge, motivation, social influences (rewards), together with other contextual influences such as the physical environment (Anderson, Potočnik & Zhou, 2014; Madjar, Greenberg & Chen, 2011). Hence, the interactionist theory has been regarded as one of the most frequently used conceptual frameworks for studies in this domain, thereby accentuating this interaction between the contextual and individual factors that might enhance or inhibit employee creativity at work (Shalley, Gilson, & Blum, 2009; Zhou & Shalley, 2011). Consequently, with regards to individuals' creativity, the interactionist theory has focused on how tasks and social perspectives moderate the relation between individuals' cultural values and creativity, therefore, considering cultural differences in individual creativity (Erez & Nouri, 2010). It has also considered how social beliefs control creativity through the influences of leaders, supervisors, coworkers, and social systems (Zhou & Su, 2010); how the assessment of creativity influences culture (Hempel & Sue-Chan, 2010); and how the entire process of creativity is affected by culture (Chiu & Kwan, 2010).

2.3.3 Integrative Model

Besides the above, some empirical studies have been conducted using what is referred to as an integrative model in response to calls for research that addresses the joint or combined effects of personal and contextual factors on employee creativity (Eisenbei & Boerner, 2015). In this instance, researchers have acknowledged the profoundly related impact leaders can have on an employee's performance to provide creative and innovative results (Henker, 2013; Jasiwal & Dhar, 2015), with some studies focused on the supervisor's leadership style (Wang, Rode, Shi, Luo & Chen, 2013; Gupta, Singh, Kumar & Bhattacharya, 2012; Zhang & Bartol, 2010). Henker (2013), for example, reported that in the work environment, a

leader's behaviour is a key factor that determines creativity among individuals. This is in addition to other individual-level variables that play a major role in nourishing employee creativity (Sun, Zhang & Chen, 2012). Tierney (2008) also found that both leadership and supervision have essential influences on creativity whereas other studies considered the impact of specific supervisory behaviours on employee creativity thereby raising the need to research further in this area. Some of these supervisory behaviours are supervisory support (Madjar, Oldham & Pratt, 2002), supervisory expectations for creativity (Carmeli & Schaubroeck, 2007; Tierney & Farmer, 2004), supervisory empowerment behaviours (Zhang & Bartol, 2010a), supervisory developmental feedback and non-close monitoring (Zhou, 2003), supervisory benevolence (Wang & Cheng, 2010), and abusive supervision (Liu, Liao, & Loi, 2012). These studies have all been used to predict employee creativity through the presentation of a comprehensive model (Jaiswal & Dhar, 2015).

2.3.4 Individual Creative Action Model

This model is another one for employee creativity that emerges from the literature based on employees' motivation to decide between two competing preferences which are to undertake just routine expected actions or to be creative (Anderson, Potočnik & Zhou, 2014; Ford, 1996). This framework considers three groups of factors that might influence this decision between the competing preferences which are sense-making processes (which involve endeavoring to verify, support, and endorse an identity through reconciling pertinent inputs from others and oneself), motivation, knowledge, and skills **(**Farmer, Tierney & Kung-Mcintyre, 2003). An employee's creative action is argued as consequently being derived from the dual influence of these factors such that if either of them is lacking, the employee will not indulge in creative action. Even though not much research attention has been given to this model, unlike the componential or interactionist frameworks, possibly because the model is relatively complex, it may be challenging to empirically test it as a whole (Anderson, Potoĉnik & Zhou, 2014; Unsworth & Clegg, 2010). Yet still, more recent years have seen portions of it receive some empirical support.

Apart from these major theoretical frameworks and models underpinning research into employee creativity, the extant literature reveals that some studies have focused on individual theories to explain other factors that engender employee creativity in organizations. Hur, Moon & Rhee (2016) for instance applied Affective Events Theory

(AET) to explain the mediating role creativity plays between compassion at work and job performance. This view that affective reactions are caused by organizational events leads to changes in attitudes and behaviours of the employee. They suggested that experiencing compassion based on AET opens up employees in the service industry to have a positive emotional state which can be converted into emotional or mental openness to new opportunities and learning, such as a sense of creativity. Similarly, theories like social cognitive theory and creative role theory (Wang, Tsai & Tsai, 2014), transformational leadership (Eisenbeiß & Boerner, 2013), and intrinsic motivation theory of creativity (Herrmann & Felfe, 2013) have all been used to provide insight into the interrelationship between various antecedents and factors of employee creativity. Others such as Social Exchange Theory (Blau, 1964), cognitive flexibility, and divergent thinking theories are also used to explain the phenomenon of counterproductive work behaviour (Gino & Ariely, 2012).

The study notes that these theories as discussed have only sought to analyze the relationship between particular personal and contextual factors that affect employee creativity on general direct levels. As this study seeks to examine not only the factors that influence employee creativity but also its effect on work behaviours and performance outcomes, there is the need to adopt theories that can explain further these multifaceted relationships. In this regard, after a general discussion on existing theoretical underpinnings from the literature supporting research in this field, the study employs three main related theories namely: Transaction Cost Analysis (TCA), Social Exchange Theory (SET), and Goal Orientation Theory (GOT) to be able to examine the multiplicity of these relationships. It must be noted that these theories in one way or the other reflect the theoretical perspectives described in the three main tested theories of componential, interactional, and integrative earlier discussed. The study reasons that TCA reflects elements of the interactional theory while SET also portrays features of both componential and interactional theory. Similarly, GOT reflects the elements of the integrative research model. Additionally, segregating the hypothesis of the study under these particular theories provides a more extensive insight considering the paradoxical relationship of the antecedents and contingent effect of employee creativity on CWB.

2.3.5 Transaction Cost Analysis (TCA)

Transaction Cost Analysis (TCA) according to Erramilli and Rao (1993) involves assessing the costs and benefits obtained in retaining control in a specific situation in an organization. Carefully weighing these against each other leads to the most efficient system being the one with the highest benefit-to-cost ratio. In respect of this, the research identifies situations in which the benefits of control outweigh the costs of control and vice versa.

Coase (1937) for example has previously proposed in marketing literature that the expenses involved in conducting economic exchange in a market under certain conditions may go beyond the costs of organizing the exchange within a firm. Transaction costs in this context are the "costs of running the system" including such extant costs as preparing and negotiating contracts and ex-post costs which cover monitoring and enforcing agreements. However, in the span of the past two decades, Williamson (1975, 1985, and 1996) added substantial precision to Coase's general argument when he identified types of exchanges appropriately better conducted within the confines of a firm than within the market. He has improved upon Coase's (1937) initial framework with the proposition that both the direct costs of managing relationships and the possible opportunity costs of making inferior governance decisions are included in transaction costs. Williamson's microanalytical framework is based on the interaction that occurs between two key assumptions of human behaviour (bounded rationality and opportunism) on the one hand, and two key dimensions of transactions (asset specificity and uncertainty) on the other hand.

The opportunistic behaviours according to TCA, involve concealment or distortion of information, evading responsibilities, deceitfulness, and other elusive forms of dishonest behaviours that occur in exchange relationships principally for the reason of bounded rationality and information uncertainty (Williamson, 1985). Thus, in TCA, these constraints lead to challenges in uncertain environments, wherein the circumstances surrounding an exchange are unclear leading to environmental ambiguity, and performance is not easily substantiated ex-post resulting in behavioural uncertainty (Rindfleisch, 1997). Primarily, environmental uncertainty results in an adaptation problem, so that difficulties with modifying agreements to changing circumstances ensue while the consequences of behavioural uncertainty become a performance evaluation problem, resulting in problems in attesting whether there is compliance with established agreements (Rindfleisch, 1997).

With these insights into the workings of TCA from prior research, two principles of TCA inform our study in discussing output and process control as antecedents of employee creativity and its effects on counterproductive work behaviour. Organizational control involves the organizational standard specifications for matching the engagements of employees against the organizational goals, in addition to monitoring and rewarding the degree to which such standards are required (Verburg, Nienaber, Searle, Weibel, Hartog & Rupp, 2017). Control practices can comprise varying blends of formal and informal controls, in that while formal controls depend on officially documented rules usually executed by managers, informal controls are based on norms often implemented by peers (Verburg et al., 2017). Controls assist both employees and supervisors to deal with situations relating to both risk and tendencies through the systematic application of distinct and recognizable rules by offering predictability and protection against arbitrariness (Verburg et al., 2017). Thus according to Sitkin, Cardinal, and Bijlsma-Frankema (2010), generally, control practices ensure that information on relevant performance standards is given to employees to correct deviant behaviour and to inspire effective performance. This study identifies two control targets which are output controls and process controls. Outcome controls are directed at achieving goals and outcomes whereas process controls are associated with compliance with procedures (Carbonell & Rodriguez-Escudero, 2015; Weibel, Den Hartog, Gillespie, Searle, Six, & Skinner, 2016).

Given this, the study identifies supervisory factors, output, and process controls as antecedents of employee creativity and extends the literature by examining their effects on employee creativity. Firstly, it reasons that to prevent opportunism and ensure that creative employees do not behave dishonestly in exchange, the contenders must resort to control mechanisms. The belief of controls preventing opportunism is argued will help manage creativity such that it will minimize opportunistic behaviour which may be detrimental to organizational performance. Despite this, the literature again cautions that an intense, controlling supervisory style will discourage out-of-the-box thinking, enhancing satisfaction with the current situation which consequently has a destructive effect on creativity (Erkutlu & Chafra, 2015; Oldham and Cummings, 1996). This mechanism must, therefore, be carefully applied when managing employee creativity. Secondly, since TCA suggests that when the environment of the exchange permits, opportunism is more likely, it stands to reason that parties involved in the exchange evaluate the benefits and costs of opportunistic

behaviour (Atuahene-Gima & Li, 2002). Thus, this study examines the effects of output and process controls on employee creativity and their moderating effects on CWB as supervisors-initiated control mechanisms to manage this relationship. It, therefore, draws from transaction cost analysis as a theoretical underpinning for these hypothesized relationships, and these controls are subsequently discussed.

Output control

Output control concentrates on the products, outcomes, or services of employees and it requires formulating prescribed defined targets and engaging evaluation systems that permit monitoring to ensure the meeting of targets whereas goal execution results in rewards and sanctions (Sitkin, Cardinal & Bijlsma-Frankema, 2010). Output control, for instance in a software development project may govern aspects such as operational requirements, financial plan, contractual agreements, and the ultimate products. Secondly, output control affords feedback essential for employees, thereby reinforcing the belief in the organization's ability and enthusiasm to back their knowledge and readjusting efforts to maximize their competence (Verburg et al., 2017).

Process control

Similarly, process controls inform how employees execute their job determining by what means standardized procedures are enacted (Carbonell & Rodriguez-Escudero, 2015). It also indicates the degree to which management endeavors to attain organizational goals through activities, specifying, and monitoring procedures pursued in an organization (Carbonell & Rodriguez-Escudero, 2015). Process control entails an outline of processes and rules concerning the performance of employees' work functions, monitoring the performance of processes and rules, and determining rewards or sanctioning practices (Snell, 1992). According to Carbonell and Rodriguez-Escudero (2015) for example, a front desk employee may be given a predefined guide for dealings with customers. The employee is evaluated on metrics that his or her supervisors can consequently use for performance appraisal purposes. In this case, both output and process controls can have dire consequences on the creative performance of such employees' contingent on how it is exercised by supervisors and managers of organizations.

2.3.6 Social Exchange Theory (SET)

Similarly, Social Exchange Theory (Blau, 1964) suggests it is not only an economic exchange that can explain the behaviours of persons in a reciprocity relationship (Atuahene-Gima & Li, 2002). This theory can be situated in the componential theory which proposes that the work environment affects creativity through influencing the components contributing to creativity (Anderson, Potočnik & Zhou, 2014). In the same way, it further has a relation with the integrative model which points out the personal and contextual factors impact on employee creativity (Eisenbeiß & Boerner, 2015). These exchange relationships can also be explained using social interactions involving repeated exchanges, future obligations, and believing that the obligations of each party will be discharged eventually. Social exchange theory postulates that in mutually supporting interactions, relations between parties produce a reciprocity type and, possibly, tradeoff reciprocity (Cropanzano & Mitchell, 2005). The reciprocity theory as specified by Gouldner (1960) posits that when one party receives adequate treatment, he or she feels compelled to offer the same acceptable treatment in return. Such that, a beneficial party is obligated to react in kind to the party providing that benefit. Similarly, it stands to reason that negative treatment or poor behaviour when shown would be reciprocated with poor treatment. This application of the social exchange theory and the reciprocity rule to organizations must be noted to have been supported by researchers in previous studies (Eisenberger, Fasolo & Davis-LaMastro, 1990). Dejoy, Schaffer, Wilson, Vandenbert & Butts (2010) for example, found that views of support for organizations and investment in employees generate a compulsion among employees to, in return, and provide favorable treatment to the organization. In effect, employees will accordingly respond to their observation of how their organization or supervisor treats them.

Unlike getting products or real benefits in economic exchanges, the implementation of the benefit in social exchanges is optional (Aryee, Budhwar & Chen, 2002). From this theoretical perspective, some characteristics of employee creativity have been identified as being ready to take risks (Madjar, Greenberg & Chen, 2011), rules-breaking (Brenkert, 2009), and the determination to face organizational and environmental challenges (Mittal & Dhar, 2015) which are derived from the individual's characteristics. This peculiar nature of creativity suggests that creativity will thrive where there is a conducive environment (such as rewards and opportunities) and a good relationship between supervisors and employees.

Hence, the study argues that a social exchange relationship that leads to effective communication and understanding between both the creative employee and his supervisor and the organization advances creativity. Given this, the study proposes that some personal and supervisory factors such as self-efficacy, role identity, role ambiguity, and transformational leadership that affect employee creativity can be examined in the context of social exchange theory. A detailed discussion of these antecedents is subsequently presented.

Role identity

Accordingly, to Erkutlu and Chafra, (2015), role identity is a self-opinion or outlook ascribed concerning a specific role by oneself (Farmer, Tierney & Kung-McIntyre, 2003). Individuals use role identities as cognitive representations to give meaning to themselves, help interpret happenings, and for channeling behavioural choices (Stryker and Burke, 2000). Generally, role identity, according to role theories, consists of related "multiple selves" further defined as a hierarchical classification of identities. Judging some identities as being more important than others, individuals usually fulfill multiple roles in a salient order, (Wang & Cheng 2010). Role identity theories reveal that an individual's perceived opinions held of himself or herself by others match with the self-views of his or her similar role behaviours, thus substantiating, supporting, and confirming that individual's role identity (Erkutlu & Chafra, 2015).

Consequently, individuals are inclined to display behaviours per their role identities because no longer fulfilling such a role may end in considerable social and personal costs (Wang & Cheng, 2010). The literature acknowledged two main role identities which are empowerment role identity and creative identity which is linked to employee innovation implementation and work behaviour (Erkutlu & Chafra, 2015; Zhang & Bartol, 2010). This study, however, focuses on role identity as an antecedent under personal characteristics of employee creativity leading to counterproductive work behaviour. It can be argued that in situating this antecedent in the social exchange theory, where one perceives an affirmation and recognition of one's role identity about creativity by the supervisor, such a role will be so exhibited in the organization.

Self-efficacy

Self-efficacy is the degree to which an individual believes he or she is capable of producing certain work outputs (Tierney & Farmer, 2002; Wang, Tsai & Tsai, 2014). Some studies have considered specific creativity self-concepts or characteristics including creative self-efficacy and related it to other factors contributing to employee creativity in organizations (Liao, Liu, & Loi, 2010; Tierney & Farmer, 2011; Wang, Tsai & Tsai, 2014). Tierney and Farmer (2011) for example, define creative self-efficacy as an employees' self-view regarding the degree to which they can exercise their creativity. They studied what pertains to creative self-efficacy development and creativity over time. Equally, self-efficacy in creative activities is a significant trait of exhibiting creativity at work. Thus, employees can increase their involvement in creative behaviour when they feel a high level of confidence in their self-efficacy for creativity (Gong, Huang & Farh, 2009; Tierney & Farmer, 2002, 2011).

Role ambiguity

This antecedent denotes a lack of communication or mutual understanding about the role an employee is expected to play in an organization (Atuahene-Gima & Li, 2002; Schmidt, Roesler, Kusserow & Rau, 2012). According to authors Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964), role ambiguity is the result of a lack of information thereby leading to loss of clarity in a specific job situation. Role ambiguity causes uncertainty about employees' jobs, job objectives, and related responsibilities which leads to vague expectations of colleagues and supervisors (Schmidt, Roesler, Kusserow & Rau, 2012). How role expectations or goals affect creativity has attracted considerable research interest. Shalley and Gilson (2004) for instance, suggested some job-level related factors of creativity which include role expectation and goals. Consequently, it has also been suggested that employees confused by unclear roles and goals in their attempt to cope with or to reduce strain may altogether abandon their creative inclinations (Tang & Chang, 2010 citing Ford, 1996).

Transformational Leadership

Leadership has generally been acknowledged in numerous instances to play a vital role in nurturing and supporting employee creativity and has mainly been classified into transformational and transactional leadership (Eisenbeiß & Boerner, 2013; Herrmann & Felfe, 2013). Creative output is possibly increased by leaders who create an appropriate organizational structure, work environment, culture, and human resource practices. Some

leadership behaviours influence employees' perceptions of their work environments, which subsequently influences, their creativity (Herrmann & Felfe, 2013). Those specific behaviours likely to have a significant effect on employee creativity include encouraging employees to express their ideas, giving feedback in a timely and constructive manner, and providing autonomy. Others are; providing high levels of social support, showing concern for employees' feelings, providing a balance between employees' freedom and responsibility, and facilitating skill development (Herrmann & Felfe, 2013). In this wise, a transformational leader should be able to and is required to stimulate their employees intellectually thereby activating their employees' creativity (Eisenbeiß & Boerner, 2013; Oldham & Cummings, 1996). Consequently, it is argued that transformational leadership will cause creative employees to respond and behave in a certain way which will result in a social exchange relationship.

2.3.7 Goal Orientation Theory

Lastly, goal orientation theory is considered by the study to explain the relationship between the variables under goal orientation and employee creativity and subsequently its moderating effect on the relationship between employee creativity and counterproductive work behaviours in organizations. Scholars have recently embraced goal orientation theory in the search for understanding creativity, (Gong, Huang, & Farh, 2009; Hirst, van Knippenberg, & Zhou, 2009). The notion of goal orientation is derived from the studies done by Dweck and her team with children from primary schools (Dweck, 1986; Dweck & Elliott, 1983; Elliott & Dweck, 1988). They found that children appear to embrace one of two distinct fundamental goals which are to either cultivate their competence, referred to as a learning orientation, or exhibit their ability, referred to as a performance orientation. Yet, the basic distinction accentuates that while some individuals endeavor to outperform their rivals or even colleagues; others endeavor to enhance their competence and develop their capability (Moss & Ritossa, 2007). It must be noted that situational factors such as guidance, assigned goals, and an evaluation focus (which is learning or performance) can "prompt" goal orientation (Bunderson & Sutcliffe, 2003) which "signal the goals and behaviours that are desired, emphasized, or rewarded in the context of a particular group or collective" (Bunderson & Sutcliffe, 2003 p.553). Consequently, research has generally shown some level of relationship between individual goal orientation and individual creativity (Gong, Kim, Lee & Zhu, 2013) to support the use of this theory in the study.

Goal orientation according to Zhang, Ji, Anwar, Li, and Fu (2018) signifies individual goals pursuant or situational goal inclinations when undertaking a task engagement. It also reflects what individuals determine, interpret, and respond to as achievement situations based on their self-development beliefs (Dweck, 1986). As such, it is regarded as the response predispositions to the success of the individual (Spinath & Stiensmeier-Pelster, 2003). Pertinent literature proposes that the value of goal orientation resides in managing the attention and efforts of employees to cultivate pioneering solutions to problems faced at work (Zhang, Ji, Anwar, Li & Fu, 2018). Hence, goal orientation, as motivational as it were, emboldens employees to tackle difficulties in the related work processes determined by intrinsic task motivation or extrinsic factors such as receiving rewards or avoiding criticism.

Consequently, goal orientation mirrors self-development views and how individuals are led to understand and engage with their environment and are basically about self-regulation of behaviour (DeShon & Gillespie, 2005). Although goal orientation is previously regarded as consisting of two separate constructs (learning and performance goal orientation), recent research indicates that it has three distinct dimensions, being learning, performance-approach, and performance-avoidance (VandeWalle, 1997). Particularly, learning goal orientation focuses on increasing competence and task expertise, performance goal orientation focuses on demonstrating competence to others while performance-avoidance goal orientation focuses on avoiding mistakes and negative evaluations (Elliot & Church, 1997; Hirst, van Knippenberg, & Zhou, 2009; Hirst, van Knippenberg, Chen & Sacramento, 2011; VandeWalle, 1997). Similarly, achievement orientation shows the extent to which a leader defines challenging targets, anticipates high levels of performance, and expresses confidence in the employee's capacity to meet the goals and expectations (Atuahene-Gima & Li, 2002). This study, given this, isolates and utilizes learning orientation, performance orientation, and achievement orientation under goal orientation theory in its analysis to achieve the purpose of the study context.

Learning Orientation

Scholars have variously defined learning goal orientation (usually captured also as learning orientation in the literature) as a concern for, and commitment to, developing one's capability (Dweck, 1986, 2000; Gong, Zhou & Chang, 2013; Hirst et al., 2011). A learning orientation nurtures a task-oriented inherent interest as challenging work provides a means to develop skills and knowledge. Although there may be an absence of extrinsic rewards, when it comes

to learning orientation, there is an increase in the likelihood that persons will invest effort and persevere to complete complex tasks (Dweck, 1999). In contrast, extrinsic factors such as competing against others, receiving rewards, acknowledgment, or avoiding criticism may also motivate persons (VandeWalle, 1997). The componential model of creativity proposed by Amabile (1996) has identified three building blocks essential for employee creativity which are domain-relevant skills, creativity-relevant skills, and intrinsic task motivation. Particularly significant in this regard is learning orientation, because both skill acquisition and intrinsic motivation may likely relate to it. More so, it may impact an employee's readiness to pursue and use feedback to develop their skills and creativity.

Performance Orientation

Similarly, performance goal orientation employees are primarily motivated by the external outcomes related to performance (Gong, Huang, & Farh, 2009). Employees with performance goal orientation usually seek to maximize rewards and minimize potential punishments, using environmental indications to enable them to decide which behaviours are appropriate (Anderson, Potočnik & Zhou, 2014). Thus, they can be expected to focus on the indicators provided by co-workers or supervisors as a source of information to determine the kind of attitudes and actions favored. Employees exhibiting a performance orientation do not often involve themselves in extension memory, thus demonstrating a limitation of specific profiles (Moss & Ritossa, 2007). Hence, they will make a big deal to trivial barriers in their work settings (Van Yperen & Janssen, 2002) while the perception of their enabling work situation will decrease thereby lowering their organizational commitment (Meyer, Stanley, Herscovitch & Topolnytsky, 2002). Moreover, as shown by Janssen and Van Yperen (2004), with their commitment declining, performance orientation can compromise creativity and task performance.

Achievement orientation

Achievement orientation refers to an employee's principles and behaviours as regards achievement, success, and surmounting difficulties that trigger behaviour across different situations (Steinmayr & Spinath, 2009). It also captures the employee and supervisor's goals converging, thus reflecting agreement on goals and shared values (Atuahene-Gima & Li, 2002). Scholars in psychology believe that achievement orientation is a personality trait that vitally contributes to organizational job performance (Byrne & Reinhart, 1989) which makes examining the role of achievement orientation and its contribution to the understanding of

job performance and insecurity important (Greenhalgh & Rosenblatt, 1984). An employee's achievement orientation considered as a personal characteristic is often conceptualized as a "perceptual, cognitive framework that affects employees' approach towards interpreting and responding to achievement activities" (Yi & Wang, 2015). These achievement activities consist of success, achievement, and overcoming barriers to accomplishments (Steinmayr & Spinath, 2009). The literature reveals that achievement-oriented employees usually display performance orientation (Yi & Wang, 2015 citing Dweck, 1989) as they envisage high expectations for their performance which is a means of indicating one's ability (Yi & Wang, 2015). Employees high in achievement orientation keenly seek ability assessment and performance feedback and are motivated intrinsically to attain high levels of distinction while those low in achievement orientation abhor competence evaluation, try to bypass performance or achievement situations, and are more likely to display apprehension in such situations (Yi & Wang, 2015). Given this, the achievement orientation of employees under the Goal Orientation Theory is considered as an antecedent likely to influence an employee's creative performance in an organization.

2.4 Study Hypothesis

2.4.1 The Relationship between the Antecedents and Employee Creativity

Even though prior literature has revealed that there is a wealth of knowledge on the antecedents of creativity, attention to the outcomes of creativity is not much considered (Gong, Zhou & Chang, 2013) and its possible adverse effects on organizational performance. Moreover, little empirical research has systematically examined the possibility that personal characteristics and contextual factors that may contribute significantly to employees' creativity may also be hindering performance at work in other areas (Amabile, 1996; Tang & Chang, 2010) thereby leading to counterproductivity. In this regard, the study examines the antecedents and contingent effect of employee creativity on workplace behaviours such as CWB in this section by discussing theories that can be adopted to explain and test these relationships and formulate hypotheses. The first part examines the direct effects of the antecedents on employee creativity while the second part looks at the relationship between employee creativity and CWB. Finally, the study discusses the moderating effect of the antecedents of personal characteristics and supervisory factors on the relationship between

employee creativity and CWB which is the main line of inquiry in the study on when employee creativity matters.

The effects of role identity: Role identity is a personal characteristic of an individual's self-identification as a person considered an important element of job functions (Farmer, Tierney & Kung-McIntyre, 2003; Tierney & Farmer, 2011). As mentioned earlier, Social Exchange theory proposes that employees have a heightened desire to resolve difficult work-related processes and problems determined by intrinsic task motivation or extrinsic factors such as rewards or avoiding criticism. Consequently, external recognition of their self-identity by coworkers and supervisors plays a role in their work output. Thus, employees will use their role identity as a cognitive system to provide meaning for themselves, help understand events, and channel behavioural options (Erkutlu & Chafra, 2015). As the literature suggests, an employee's role identity results from feedback about the self from social relations and associated self-views, its two main sources (Riley & Burke, 1995; Tang & Chang, 2010), which affects his or her ability to achieve creative results. Consequently, employees with a high role identity will not contradict their creative roles by satisfying their role obligations in a way that fulfills their self-identification to achieve their goals.

Similarly, employees with low role identity will forgo creative actions to avert their self-views from being damaged (Farmer, Tierney & Kung-McIntyre 2003; Wang & Cheng, 2009). In this regard, eventually, an employee's role identity reflects a set of role expectations internalized with this identity as a commitment function to a relevant role. The study, therefore, argues that a strong role identity will cause a creative employee to engage more in creative activities because it is deemed as a part of himself or herself thereby achieving this goal. Given this, the study proposes that there is a relationship between role identity and employee creativity and formulates the following hypotheses:
Hypothesis 1: Role identity is positively related to employee creativity.

The effects of self-efficacy. Self-efficacy as an employee's characteristic refers to an individual's conviction in one's capability to perform a given task (Richter, Hirst, van Knippenberg & Baer, 2012). Some scholars in developing the concept of creative self-efficacy refer to it as the level to which creative outcomes are generated based on an individuals' belief (Bandura, 1986; Tierney & Farmer, 2002). This concept is consistent with Social Exchange Theory, which postulates that an employee will increase their involvement

in creative behaviour when they feel a high level of confidence and recognition in their self-efficacy for creativity (Gong, Huang & Farh, 2009; Tierney & Farmer, 2011). Then again as earlier suggested, this is a reflection of what a person identifies, interprets, and responds to as achievement situations based on their self-development beliefs (Zhang et al., 2018). In this respect, Bandura and Schunk (1981, p.587) stated that "a sense of personal efficacy in mastering challenges is apt to generate greater interest in the activity than is self-perceived inefficacy in producing competent performances." The results of their test point out that self-efficacy is positively related to intrinsic interest (or motivation), essential for employee creativity, and therefore concluded that self-efficacy and creative performance are likely to be related. According to Tierney & Farmer (2011), a sense of self-efficacy in creative activities can help to remove fundamental obstacles to creative engagement. Thus, an employee with a high level of self-efficacy tends to be more creative at work and therefore has higher levels of creative work involvement. Consequently, it is argued that employees with high self-efficacy can surmount the difficulties they face (Tierney & Farmer, 2002), and at the same time enable them to seek creative solutions to successfully carry out their job functions (Bandura & Locke, 2003). Therefore, the study posits that:
Hypothesis 2: Self-efficacy is positively related to employee creativity.

Effects of learning orientation*:* Learning orientation as pointed out focuses on employees' attention on acquiring new knowledge and developing "deep-processing strategies" enabling mastery of challenging tasks (Elliot & McGregor, 2001). Consistent with goal orientation theory, this focus on expertise development related to learning orientation indicates a fundamental interest in understanding and mastering task performance (Janssen & Van Yperen, 2004). Consequently, prior research argues that this interest in the task itself derived from intrinsic motivation often results in creativity from the deeper and more intensive engagement with the task, (Amabile, 1996; Hirst, van Knippenberg, Chen & Sacramento, 2011). Again, since a learning orientation is connected to preferences for challenging and demanding tasks when employees have a strong learning orientation, they may be more naturally motivated to be creative (Hirst, van Knippenberg & Zhou, 2009). They may, therefore, seek out creative activities through methods that are uncertain and untried which have a high probability of error or potential failure.

Similarly, a learning orientation may nourish creativity by stimulating the development of domain-relevant skills and creativity-relevant skills thereby providing the necessary

underlying knowledge and basis for creativity (Amabile, 1996; Hirst, van Knippenberg & Zhou, 2009). Then again the aspiration to learn heightens the learning desire of employees motivating them to elaborate work information, which can enhance individual creativity (Grant & Berry, 2011). Thus, the study argues that there is a relationship between learning orientation and employee creativity and postulates that:

Hypothesis 3: Learning orientation is positively related to employee creativity

Effect of performance orientation. In contrast to learning orientation, employees possessing a performance goal orientation are motivated by the external outcomes related to performances which include competing against others, receiving rewards, acknowledgment, or avoiding criticism (Hirst, van Knippenberg, Chen & Sacramento, 2011). In line with goal orientation theory, it is, therefore, argued that performance-oriented employees might be concerned more with accomplishing high-performance outcomes than being creative in carrying out their functions. Since high performance-oriented employees pursue maximizing rewards and minimizing potential punishments thereby adopting environmental indicators to choose which behaviours are appropriate (Gong, Huang, & Farh, 2009; Hirst, van Knippenberg, & Zhou, 2009), they are not likely to participate in creative happenings inconsistent with their goal orientation. Thus, this study argues that performance-oriented employees who are more concerned with achieving the outcomes of high performance will not engage much in creative activities. The study, therefore, formulates the hypothesis that:

Hypothesis 4: Performance orientation is negatively related to employee creativity

Effects of Role ambiguity. Role ambiguity is the lack of specificity and certainty for an employee's job functions or role, and this weakens available information quality to evaluate correctly an individual's capacity to perform a task (Tang & Chang, 2010). Role ambiguity causes uncertainty about employees' jobs, job objectives, and related responsibilities which leads to vague expectations of colleagues and supervisors (Schmidt, Roesler, Kusserow & Rau, 2012). Thus, when role-related information or functions are not clear, it may lead to role ambiguity. It must, therefore, be noted that a high role ambiguity inhibits an individual's ability to visualize one's performance. This ultimately reduces one's confidence in their ability to perform effectively such that an employee's capability to perform his or her job functions is negatively affected.

Consequently, previous studies have suggested that role ambiguity may affect employee creativity negatively (Tang & Chang, 2010). This is because when employees are placed in an unstructured environment that is not challenging and is risk-free, studies suggest that they become accustomed to the ambiguous environment as they gradually learn to accept this ambiguity. Thus, this study argues that role ambiguity may diminish such employees' desire to engage in creativity as they experience low self-efficacy and job satisfaction in creative works (Tang & Chang, 2010). As such, a high role ambiguity will influence employee creativity negatively as employees are not motivated to put in much effort while a low role ambiguity will have an adverse effect and therefore the study proposes that:
Hypothesis 5: Role ambiguity is negatively related to employee creativity.

Effects of Transformational leadership. Transformational leadership is described generally as the inspiration leaders give to their employees to broaden and raise their interests by nurturing the awareness and acceptance of the mutual interests over self-interests through a vision with a mission sense (Li, Bai & Xi, 2012; Wang & Howell, 2010). Some studies have proposed that employee creativity will increase when a supervisor provides transformational leadership to their employees (Gong, Cheung, Wang & Huang, 2009; Shin & Zhou, 2003). This is because transformational leadership has been defined "as influencing subordinates by broadening and elevating followers' goals and providing them with confidence to perform beyond the expectations specified in the implicit or explicit exchange agreement" (Dvir, Eden, Avolio, & Shamir, 2002, pp.735). The literature identifies some ways through which transformational leadership influences employee creativity in an organization. One way is through behavioural modeling influence which enhances subordinates' ability to nurture new ideas and question outmoded operating rules thereby intellectually stimulating these subordinates which may activate their creativity potential (Eisenbeiß & Boerner, 2013; Gong, Cheung, Wang & Huang, 2009).

Similarly, through individualized consideration, transformational leadership helps employees surmount the fear of challenging how things stand through a show of empathy, consideration, and support for employees leading to higher creativity. Other ways include the use of cognitive and motivational mechanisms (Eisenbeiß & Boerner, 2013). Concerning the cognitive mechanism, transformational leadership creates opportunities for employees to do away with normal thought patterns, encourage them to critically appraise and reflect on existing assumptions and working methods and adopt an explorative and open mindset and to think 'out of the box' (Eisenbeiß & Boerner, 2013). A motivational mechanism, on the other hand, is used by transformational leadership as 'change agents' to

encourage employees to explore and attain new heights in their field of endeavor. Hence, transformational leadership enables employees to assume and experience differences between a desired future state and a given situation in terms of a challenge rather than a threat thus, raising their effort and creativity. Consequently, according to Social Exchange Theory where transformational leadership creates these enabling environments for employees, they are more likely to explore and be more creative. Thus, the study argues that transformational leadership by these means is assumed to influence employees' creativity positively, as it provides employees with intellectual stimulation and role models for unconventional behaviour and an original thinking style. Due to this, the study proposes that:

Hypothesis 6: Transformational leadership is positively related to employee creativity.

Effects of achievement orientation. Achievement orientation indicates the degree to which the supervisor sets challenging goals, expecting high levels of performance to express confidence in the ability of an employee to meet the organizational objectives and expectations (Atuahene-Gima & Li, 2002). The literature points out that achievement-oriented employees see themselves as skillful, and are mindful, and care about excelling or outperforming others (Yi & Wang, 2015). Such achievement-oriented employees are enthusiastic about any competitive activity which presents itself to enable them to demonstrate their ability and thus keenly face the challenge inherent in the competition (Yi & Wang, 2015). Consequently, to outdo others in such a competitive situation, achievement-oriented employees are inclined to work harder and demonstrate more work effort while reducing work avoidance behaviours. In this regard, the study argues that achievement-oriented employees are likely to indulge in creative behaviours to boost their performance to demonstrate their capabilities. Thus, as Goal Orientation theory suggests, an emphasis on the achievement of goals will lead to employee creativity with the logic that achievement orientation reflects the convergence between an employee thinking in creative ways to perform his or her job functions successfully and a supervisor's expectation of meeting organizational goals. Therefore, the study proposes that:

Hypothesis 7: Achievement orientation is positively related to employee creativity

Effects of output and process controls. The literature reveals that only a few studies have investigated how control practices affect employee job performance such as task performance and Organizational Citizenship Behaviour (Verburg et al., 2017). Thus, no

studies as yet have been conducted into the relationship between controls and employee creativity. Essentially, the Human Resource Management (HRM) literature has examined formal control systems as the dysfunctional reverse of high commitment work systems, as control systems are suggested to require high monitoring costs and are ineffective, inflexible, and not adaptive (Verburg et al., 2017). Beyond the HRM literature though, there exist arguments that control can contribute to performance-related outcomes in a more meaningful way (Sitkin, Cardinal & Bijlsma-Frankema, 2010). Controls within and among teams lead to coordination and communication as they describe important mutual goals and rules of engagement (Verburg et al., 2017). This means employees get a better understanding of the expectations required and what their own and other roles in the organization require, making it easier to perform their tasks as expected (Verburg et al., 2017). Nonetheless, since the creativity of employees are constrained under rigid regulations limiting their freedom to think outside the box which must involve divergent thinking (Runco (2010), such controls, as argued are bound to inhibit their creative efforts for which the lack of avenues to exercise their creativity can affect their performances.

Concerning process control, however, using it as a management or supervision tool may not augur well for an organization where employee creativity is required. This is because according to TCA although process control leads to efficient systems of operation, such control will prevent opportunistic behaviour which will discourage out-of-the-box thinking (Erukutlu & Chafra, 2015) thereby having a negative effect by stifling employee creativity. Consequently, the study argues that since process control is used to outline boundaries within which job functions are to be carried out, this places a limit on an employee's freedom to undertake creative activities. Therefore, process control will likely hinder employee creativity, and given this, the study posits that:

Hypothesis 8: Process control is negatively related to employee creativity

Output control, on the other hand, will enhance employee creativity because employees are allowed the liberty to exercise their discretion in performing their job functions so long as they meet their output target. This means as indicated in TCA, the burden of compliance with an organization's established agreements and work procedures are not borne by the employee in the exercise of his or her job functions thus, boosting his or her creative abilities to meet the desired output (Erramilli & Rao, 1993). The study in this light argues that by not spending the time to determine the right and wrong process and being self-conscious,

freedom is given to employees to focus available resources on contributing to the organization in different ways (Weibel, Den Hartog, Gillespie, Searle, Sin & Skinner, 2016) enabling employees to be creative. More so, output controls shift considerable output risks to the employee enabling him or her to exercise creativity to meet output demands. Thus, when output controls are well-implemented, employees' creativity is strengthened as it enhances the willingness to contribute through task performance. Given this, the study proposes that:

Hypothesis 9: Output control is positively related to employee creativity

2.4.2. Contingent Effect of Employee Creativity on Counterproductive Work Behaviour

In the first section, the study examined the antecedents of employee creativity. Nevertheless, the effect of employee creativity when it happens needs attention because the factors that contribute to employee creativity may not always be good to achieve the desired organizational performance and growth (Anderson & Costa, 2010; Anderson, Potočnik & Zhou, 2014). Even though employee creativity and its positive effects are extensively studied in previous researches, its relation to adverse work performance is seldom addressed. Until recently, most prior studies pointed to the importance of employee creativity and how it enhances organizational performance without considering that it may be hindering it (Gupta & Singh, 2013; Zhang & Bartol, 2010). In the next section, therefore, this study examines the main effect of employee creativity on CWB and then investigates how its antecedents may moderate the relationship between employee creativity and counterproductive work behaviours in organizations.

The effect of employee creativity on counterproductive work behaviour. Even though generally employee creativity contributes positively to organizational performance, some recent studies have found this not to be always so (Vincent & Kouchaki, 2015). Prior studies have identified three main ways in which employee creativity can lead to CWBs which are when employees use their creativity to behave dishonestly (Gino & Ariely, 2012; Gino & Withermuth, 2014), cheat (Gino, Schweitzer, Mead & Ariely, 2011) and behave unethically. These unethical behaviours give a sense of entitlement (actually result in counterproductive work of employees in an organization). According to Gupta, Jang, Mednick & Huber (2012), an employee must flout conventions and conformity and must exhibit rare ideas and solutions to be considered creative. Due to this rarity related to creativity, such employees may feel

they should be given preferential treatment, and this leads to a sense of entitlement which comes with its peculiar behavioural outcomes including dishonesty (Vincent & Kouchaki, 2015). Research suggests that creative employees feeling entitled can act to maximize their self-interest with little regard for the welfare of other employees or the organization and also seek ways in which they can receive more than what they deserve (Moran, Cropley & Kaufman, 2014).

Consequently, the creative employee may use his important role to bypass the organization's rules and regulations thereby enacting counterproductive work behaviours. Extant studies have also found that the tendency to behave unethically is caused by the cognitive flexibility resulting from an employee's creative ability which manifests in a greater ability to justify and rationalize dishonesty behaviour (Gino & Ariely, 2012). Similarly, employees who are considered creative may receive more freedom and latitude than less creative others (Baucus, Norton, Baucus & Human, 2008) which may cause them to ignore organizational rules and thus behave counterproductively.

Gino and Ariely (2012), in their study, proposed that creativity and dishonesty share similar characteristics, in that, both involve breaking the rules, and therefore just as creativity may lead to dishonesty, dishonesty may also lead to creativity. Ayal and Gino (2011) also explored a variety of situations in which creative employees experience tension between behaving dishonestly and maximizing their self-interest while also using social context to justify or excuse their unethical behaviour. In another study, Harari, Reaves & Viswesvaran (2016) in a meta-analysis of the relationships between creativity and innovation performance with task, citizenship and counterproductive job performance dimensions posited that Creativity and Innovation Performance (CIP), are functions of individual differences and also task performance determinants such as OCB and CWB. Other studies also indicate that CIP also influences CWB especially when creative behaviours lead to circumventing procedures that ensure safety through the introduction of non-conforming work behaviours that hinder organizational performance (Burke, Sarpy, Tesluk, & Smith-Crowe, 2002; Harari, Reaves & Viswesvaran, 2016). From the above discussion and considering that employee creativity has a bad side when it leads to adverse work outcomes, this study argues that creative employees have the propensity to act in counterproductive ways. Therefore, the study hypothesized that:

Hypothesis 10: Employee creativity is positively related to the counterproductive work behaviour of employees in an organization

2.4.3 The moderating role of personal characteristics on the relationship between employee creativity and CWB

Although generally, personal characteristics such as an employee's role identity and self-efficacy are predicted as contributing to employee creativity, this study contends that under certain conditions each will mainly moderate the relationship between employee creativity and counterproductive work behaviours. For instance, a creative employee with a strong role identity sees it as a self-identification of his or her creative person and thinks of this as his or her fundamental element of job function (Farmer, Tierney & Kung-McIntyre, 2003; Tierney & Farmer, 2011). Role identities motivate role performances because a critical need for self-verification is satisfied by acting out particular roles (Tierney & Farmer, 2011) and gives room for relevant others to identify and categorize such an employee so. It has been noted that the more dominant the role identity of an individual, the more likely the behaviour of the individual will be in tandem with his or her identity (Stryker, 1980). Consequently, the notion of role identity has been useful in envisaging all kinds of behaviours (Grube & Piliavin, 2000). According to Grube & Piliavin (2000), role identity can be developed over a period due to an employee interpreting earlier and continuous role activity in retrospect, which he or she internalizes because the social and personal costs that arise from not fulfilling a specific identity-based role any more increases as role behaviours continue over time (Stryker, 1980). Thus, a previous creative behaviour should be a predictor of future creative activity as seen reflected in himself or herself, as he or she strives to make his or her identity consistent with past role-related behaviours**.**

Notably, an interesting feature of role identity is that it results in role-consistent enactments because the enactment of that identity satisfies a particular situation (Petkus, 1996). When situation-specific demands are inconsistent with a highly outstanding role identity, the identity is threatened and the identity holder will undergo feelings of distress because the identity-consistent actions are not valued or confirmed (Burke, 1991). As strongly held role identities are central to a sense of self, and an individual has a commitment to protect his or her sense of identity (Burke, 1991), in such situations the individual will lean towards refraining from role-related action. Hence, this study argues that role identity weakens the

relationship between employee creativity and CWB because an affirmation of a role identity will cause an employee to consistently portray his creative capabilities positively in carrying out his or her job functions. Contrariwise, where there is no such affirmation and conditions are not favorable, such an employee is likely to act in counterproductive ways. This is because employees with high role identities are mostly sensitive to the perceived response to their creativity and are inclined to personalize contextual feedback concerning the value of their creativity (Tierney & Farmer, 2011) and will, therefore, engage less in CWBs. This study, therefore, proposes that:

Hypothesis 11: The positive effect of employee creativity on counterproductive work behaviour is weaker when role identity is low rather than high.

Social learning theory (Bandura, 1977, 1978) states that self-efficacy signifies an employee's belief in his or her ability to undertake a defined task, and achieving a high level of self-efficacy is necessary for an employee to envisage an outstanding performance in any given situation. Bandura (1977, p. 587), has stated that "a sense of personal efficacy in mastering challenges is apt to generate greater interest in the activity than is self-perceived inefficacy in producing competent performances." He again posited that self-efficacy and intrinsic interest are positively related which is an essential aspect of employee creativity and therefore concluded that self-efficacy and creative performance are likely to be related. Carmeli and Schaubroeck (2007) also suggested that stronger perceived self-efficacy positively influenced employees' creative involvement at work thereby enhancing their work performance. Consequently, because self-efficacy is an employee's belief in his or her competency to perform a specific task, scholars have contended that reducing one's competency to perform a specific task may lead to job-related stress and job dissatisfaction (Tierney & Farmer, 2011). Thus, since an employee with a high self-efficacy would want to prove his or her competence and creative abilities in the performance of his or her job functions, the study argues that such an employee will not likely involve himself or herself in CWB. This is because engaging in CWB will be a deviation from his or her competence and creative work involvement. Hence, the study argues that a creative employee with a high self-efficacy in harmony with his or her tenets will likely engage less in CWBs inconsistent with his or her belief and therefore proposes that:

Hypothesis 12: The positive effect of employee creativity on counterproductive work behaviour is weaker when self-efficacy is low rather than high

Considering further the personal characteristics of creative employees which in H_3 predicts a positive relationship between learning orientation and employee creativity, the study foresees this as also having a moderating effect on the relationship between employee creativity and CWB. This is because employees with a high learning orientation focus on developing their expertise and interest related to the task at hand. Their desire to learn derives from, their intrinsic motivation which often results in creativity from a deep and intense task engagement (Amabile, 1996; Hirst, van Knippenberg, Chen & Sacramento, 2011). It will be recalled that research has specifically revealed that learning-oriented employees normally develop an inherent interest in understanding the task domain and therefore can likely generate new ideas that are relevant to the task domain (Hirst, van Knippenberg & Zhou, 2009; Huang & Luthans, 2014; Janssen & Van Yperen, 2004). Additionally, employees with a learning orientation rely on their emotional strength to have constant focus thereby remaining positive throughout their course of action which leads to creative outcomes (Huang & Luthans, 2014).

Consequently, employees with a learning orientation draw from domain-relevant knowledge and emotionally stable situations that facilitate them to stay motivated and persist in creative processes (Shalley et al., 2004; Zhang & Bartol, 2010). More so, from the perspective of goal orientation theory, learning-oriented employees are intrinsically inspired to put in their best to achieve set goals. Given this, creative employees with a high learning orientation having this psychological strength are unlikely to engage in acts that will be counterproductive which will prevent them from achieving their creative outcomes. Thus, the study argues that creative employees with a high learning orientation would be productive in their job functions drawing from their inherent motivation and desire to learn rather than engage in counterproductive work behaviours. Therefore, the study in line with this posits that:

Hypothesis 13: The positive effect of employee creativity on counterproductive work behaviour is weaker when learning orientation is low rather than high

Similarly, H_4 predicts that performance orientation has a negative effect on employee creativity. It is noteworthy that high performance-approach goal-oriented employees will usually focus on tasks with a desire to prove their ability to others thus, exhibiting an affective task immersion and a high level of aspiration and reasoning (Zhang et al., 2018). This will result in adaptive and constructive response patterns. Although being creative may

not be the main part of their focus in achieving their set goals, employees with performance orientation will most likely stay away from acts that will prevent them from attaining their goals. This is because high-performance-oriented employees are more interested in using environmental indicators to choose which behaviours are appropriate to maximize rewards and minimize prospective punishments (Gong, Huang, & Farh, 2009; Hirst, van Knippenberg, & Zhou, 2009). Thus, they are not likely to engage in CWBs inconsistent with their goal orientation which will be a deviation from their purpose. Equally, employees with performance orientation always seek to attain favorable judgments and external outcomes associated with performance generally motivate them, so that they give more concern to achieving the outcomes of high performance (Hirst, van Knippenberg, & Zhou, 2009). Consequently, the study argues that employees with high-performance orientation will strive to demonstrate and confirm their capabilities sufficiency by pursuing positive and avoiding critical assessments of their ability. In this regard, such employees will avoid any acts that will lead to a negative evaluation report of their ability to perform their given tasks. In this wise, although a high-performance orientation may hurt employee creativity, it will subsequently enhance the positive effect of employee creativity on counterproductive work behaviours. The study, therefore, posits that:

Hypothesis 14: The positive effect of employee creativity on counterproductive work behaviour is stronger when performance orientation is high rather than low

***The moderating role of the supervisory factors*.** As previously discussed, supervisors perform an essential role in either enhancing or hindering employee creativity (Anderson, Potočnik & Zhou, 2014; Gupta & Singh, 2013 Oldham & Cummings, 1996). Researchers on employee creativity have reported that supervisors as leaders have a critical contextual impact on employees' creative performance and innovative results (Shalley and Gilson, 2004). For this reason, utilizing social exchange theory and TCA, the supervisor's leadership style (Gong, Huang & Farh, 2009; Gupta, Jang, Mednick & Huber, 2012; Wang et al., 2013; Zhang & Bartol, 2010) has been copiously examined in the literature. For example, Amabile et al. (2004) suggested that a key factor in the work environment that determines creativity among the employees is a leader's supervision ability to influence work behaviours. Given this, the study considers role ambiguity, transformational leadership, output and process controls, and achievement orientation as some supervisory factors which moderate the relationship between employee creativity and CWB in organizations.

First and foremost, the study considers role ambiguity as a moderator on the relationship between employee creativity and CWB. Role ambiguity as suggested by Schmidt, Roesler, Kusserow, and Rau (2012) results from a dearth of information which creates a lack of clarity in a specific job position. This leads to employees' uncertainty about their role, job goals, and related responsibilities with vague co-workers and supervisors' expectations. Tang and Chang (2010) on the other hand assert that because goals are an important factor in employee creativity, their ambiguity may lead to stress which can cause CWBs. Consequently, it can be argued that while role ambiguity has a negative effect on employee creativity, the absence of defined roles can give rise to counterproductive work behaviours. This is because although role ambiguity enables employees' freedom to explore and increase their creativity, uncertainty about their expected roles results in a tendency not to conform to any organizational rules and to act in contradiction to the interest of the organization. Thus, role ambiguity creates room for creative employees to engage in CWBs so being mindful of this the study proposes that:

Hypothesis 15: The positive effect of employee creativity on counterproductive work behaviour is weaker when role ambiguity is high rather than low

Leadership is identified as a key factor, critical in encouraging and supporting employee creativity, and leadership style has been examined for its links with employee creativity in transformational leadership theory (Shin & Zhou, 2003, Wang, Tsai & Tsai 2015). Transformational leaders, as supervisors influence and motivate their employees by establishing clear broad goals and help enhance employees' confidence by providing rewards in a mutual exchange relationship (Dvir, Eden, Avolio, & Shamir, 2002, Wang, Tsai & Tsai 2015). Thus, it has been shown that transformational leadership may adopt methods consistent with social exchange theory (Blau, 1964). Amabile et al. (2004), for instance, proposed that leadership is an important attribute of the working environment for creativity. Hence this implies that employees' creativity can be positively influenced by transformational leadership since it encourages employees to be motivated and challenge the normal work processes (Gong, Huang & Farh, 2009).

Additionally, it has been theorized by Bass and Steidlmeier (1999) that transformational leadership consists of four behaviours which are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. They suggested that idealized influence, or charisma, refers to a leader being a charismatic role model for employees, positively affecting their perceptions and behaviours. Inspirational motivation is

when a leader fosters employees' desire to work in support of leadership to achieve a collective goal while intellectual stimulation refers to a leader inspiring subordinates to question assumptions, reframe problems, and stimulating employees by raising their intellectual curiosity and encouraging them to adopt new approaches. Lastly, individualized consideration involves an understanding and appreciation of the development and needs of diverse employees (Bass & Steidlmeier, 1999; Sosik, Avolio, & Kahai, 1997). These attributes of transformational leadership may likely affect subordinates in their work performance and delivery. This is because transformational leadership by working together with creative employees not only enhances their creativity but also, they inspire employees to give off their best. Consequently, transformational leadership has been argued to provide an environment conducive for employees to put in extra efforts to achieve new solutions and enhance their inherent motivation to think creatively (Wang, Tsai & Tsai, 2015) while making them more productive. Thus, transformational leadership makes it more accommodating for creative employees to freely exercise their creativity thereby less likely to engage in CWBs. This study, therefore, proposes that:

Hypothesis 16: The positive effect of employee creativity on counterproductive work behaviour is stronger when transformational leadership is high rather than low

As noted earlier, process control denotes ways in which managers attempt to achieve desired ends while output control relates to how managers emphasize the achievement of results by giving employees directions through determined output goals and standards (Carbonell & Rodríguez-Escudero, 2015). A critical role of formal controls for both process and outcome is to reduce the level of unequal dissemination of information and knowledge among employees and thus facilitate the management of activities of different employees (Schultz, Salomo, de Brentani & Kleinschmidt, 2013). Thus, even though according to Sitkin, Cardinal, and Bijlsma-Frankema (2010), control practices largely ensure that employees access information on relevant performance standards to stimulate effective performance and regulate deviant behaviour, in the context of employee creativity, this may not always be helpful. This is because employee creativity may become stifled under high control conditions which may cause them to act contrary to the job demands and engage in counterproductivity.

Given this, Carbonell and Rodríguez-Escudero (2015) have investigated the impact of process control and process-based rewards on job satisfaction because so far the effects of management controls on job satisfaction have received little marketing research attention.

This was significant because prior studies have widely recognized job satisfaction as a strong factor determining team performance delivery and effectiveness (Barczak & Wilemon, 2003; Rodríguez-Escudero, Carbonell & Munuera-Aleman, 2010). According to some authors, process control increases the amount of discipline, completeness, and care exercised by employees in their line of work thereby ensuring that such activities are carried out in line with supervisor goals (Carbonell & Rodríguez-Escudero, 2015; Schultz, Salomo, de Brentani & Kleinschmidt, 2013). Regardless of this, process control can impact job satisfaction negatively which will influence employees' creative work performance as they experience fewer jobs flexibility and autonomy. It is therefore argued that negative job satisfaction arising from process control can lead to the likelihood that creative employees will engage in acts counterproductive to the organization. Thus, the study hypothesizes that:
Hypothesis 17: The positive effect of employee creativity on counterproductive work behaviour is weaker when process control is high rather than low

On the other hand, H_8 predicts that output controls will enhance employee creativity as employees strive to meet their set targets. Despite this, output control considers employees' outcomes of products and services to ensure achieved targets, and corresponding rewards and sanctions tied to goal execution (Sitkin, Cardinal & Bijlsma-Frankema, 2010; Snell, 1992). It must be noted that creative employees in situations of output controls may however use illegal means to meet expected targets. This is because supervisors may be more concerned about meeting targets rather than the method creative employees apply to achieve their output targets which may probably be counterproductive. Consequently, it is argued that creative employees may take advantage of their creativity to engage in counterproductive work behaviour to satisfy their output requirements. Thus, the study proposes that:
Hypothesis 18: The positive effect of employee creativity on counterproductive work behaviour is weaker when output control is high rather than low

Another supervisory factor considered in this study is achievement orientation which is again predicted to have a positive influence on employee creativity. This factor helps employees indulge in creative activities by applying strategies that bring about more positive work outcomes because employees high in achievement orientation believe in their ability to surmount difficulties (Yi & Wang, 2015). Avery, Smillie, and Fife-Schaw (2015) citing Dweck (1986) for instance suggested that consistent with Achievement Goal Theory,

employees engage in behaviours with a specific competence purpose. An achievement orientation for this purpose thereby describes the pattern of reasoning and action that arises from pursuing various goals (DeShon & Gillespie, 2005) which has been posited to reflect dispositional, attribute-like motivational characteristics (Avery, Smillie & Fife-Schaw, 2015; Nicholls, 1989) that are different from basic personality traits. Significantly, the achievement-oriented employee has also been found to relate well to organizational outcomes such as learning, training, and job performance (Avery, Smillie & Fife-Schaw, 2015; Payne et al., 2007; Steele-Johnson, Beauregard, Hoover, & Schmidt, 2000).

Yi and Wang (2015) in their studies on achievement-oriented individuals and job security, also pointed out that achievement-oriented individuals manage job insecurity using strategies that result in more positive work outcomes because they believe in their competence to overcome the difficulties (Yi & Wang, 2015). Contrariwise, when the work environment is more competitive and employees have low achievement orientation, they may recoil as they are reluctant to enter the evaluation process of competence that may result from an insecure job situation (Tauer & Harackiewicz, 1999, Yi & Wang, 2015). Thus, employees with low achievement orientation will more probably see work insecurity as a possible threat and thereby show some negative workplace behaviours including high work withdrawal levels to manage work-insecurity-related stress. In this regard, the study argues that creative employees with a high achievement orientation will be less likely to engage in CWBs because of their drive and ability to overcome and attain their goals when faced with challenges in their job functions. The study, therefore, proposes that:

Hypothesis 19: The positive effect of employee creativity on counterproductive work behaviour is stronger when achievement orientation is high rather than low

2.5. Control Variables

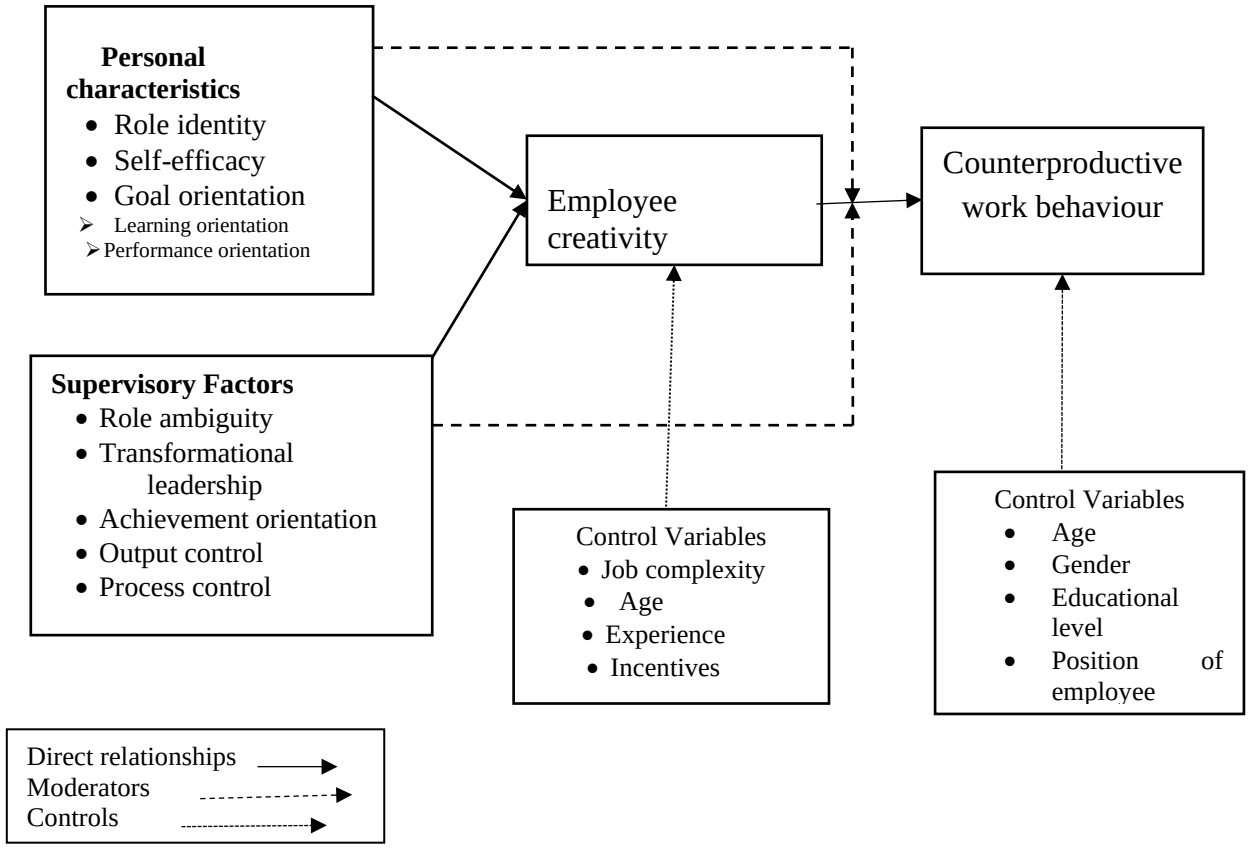
Finally, prior literature identifies some demographic variables such as an employee's age, education, and gender which are potential influences on employee creativity and counterproductive work behaviour (Shalley, Gilson & Blum, 2000; Vincent & Kouchaki, 2015). Thus, this study includes age, education, and gender as control variables because of the consideration of personal characteristics and work environment as contextual factors affecting employee creativity. This is because the study predicts these factors, which affect the maturity, and experience of employees will influence the strength of the relationships

presented by the hypotheses. The study again considers some organizational factors such as job complexity, incentives, and organizational competitiveness as well as experience and job position as control variables impacting both employee creativity and counterproductive work behaviours. Job complexity, for instance, has been considered a vital aspect of the task contexts relevant to employee creativity (Anderson, Potoĉnik & Zhou, 2014). This is because it may heighten the degree of relationship between factors such as role identity and employee creativity and influence its moderating effect on the relationship between employee creativity and CWB.

2.6 Conceptual Framework of the Study

The literature has revealed that there is a wealth of knowledge on the antecedents of creativity. However, little attention is given to the outcomes of creativity (Gong, Zhou & Chang, 2013) and its possible adverse effects on organizational performance. Moreover, little empirical work has examined systematically the possibility that personal characteristics and organizational contexts such as work environment may contribute to hindering employees' creative performance significantly at work (Amabile, 1996; Tang & Chang, 2010). Particularly, the relationship between the antecedents and contingent effect of employee creativity on workplace behaviours such as CWB, which may hinder organizational performance, is yet to be studied. Thus, this study seeks to contribute to knowledge in this field of research to fill this gap by showing that the antecedents besides affecting employee creativity also have a moderating effect on the relationship between employee creativity and CWBs in organizations. Since the literature reveals that employee creativity may not always lead to positive outcomes for organizations (e.g., Gino & Ariely, 2012, Vincent & Kouchaki, 2016), this study contends that its promotion may not always provide benefits to an organization. Instances may occur whereby the antecedents and contingent effect of employee creativity could lead to counterproductive work behaviour thereby hindering organizational performance and therefore necessitating its management in organizations. Again, the study extends and develops further the various theories adopted in its application to explain the various interactions of relationships in the conceptual model. The most insightful is the application of the Transaction Cost Analysis Theory to explain first the effect of process and output control on employee creativity and then as moderators on the relationship between employee creativity and CWB. The study, therefore, presents a framework in the theoretical model in Figure 1.

Figure 2.1: Conceptual Model Table



2.7 Conclusion

Chapter Two generally reviews prior literature on the constructs of the study and highlights some suggested relationships among the constructs of the study which will subsequently guide the testing of the hypotheses formulated. It reviews some theoretical concepts and studies on the antecedents of employee creativity and counterproductive work behaviour. Interestingly, the study notes that the relationship between the antecedents and employee creativity may not always all be positive or negative and this also applies to their roles as moderators on the relationship between employee creativity and counterproductive work behaviour. For instance, although some antecedents have a positive relationship with employee creativity, they negatively moderate the relationship between employee creativity and vice versa. This is the paradox that the study seeks to examine as understanding this relationship will enlighten managers of organizations to know when employee creativity matters in an organization to enable them to determine how it must be encouraged and managed.

CHAPTER THREE

Methodology

3.1 Introduction

This chapter presents the methodologies and procedures used in achieving the objectives of the study. Every research is based on some fundamental philosophical assumptions which inform and constitute what makes for valid research and which research method is suitable for the expansion of knowledge in a given field of study. The chapter, therefore, discusses the various underlying research philosophy and paradigms, research approaches, strategies and design, population, sample and sampling technique, data collection procedure and method of data analysis, and the ethical consideration of the study.

3.2 Research Philosophy

Research philosophy deals with the source, nature, and development of knowledge (Bajpai, 2011; Saunders, Lewis & Thornhill, 2015), which refers to the belief about how data about a phenomenon should be collected, analyzed and used. It involves formulating beliefs and assumptions which guide the direction of the study (Dudovskiy, 2018). In conducting and evaluating any research, it is therefore vital to know the underlying assumptions. According to Johnson and Clark (2006), researchers must create awareness of the philosophical commitments made through the choice of research strategy since this will have a significant impact on what is being studied and how what is being investigated is understood. Thus, the purpose of setting out the research philosophy in this study is to inform other researchers of claims the study might make in its findings and the basis of such findings and claims.

Research philosophy generally has many branches related to a wide range of disciplines and the choice of a specific research philosophy has implications for the study. The literature reveals several paradigms proposed by researchers over the years. However, Candy (1989), one of the leading scholars in the field of paradigms, suggests three main taxonomies, namely Positivist, Interpretivist, or Critical. Other researchers, on the other hand, such as Tashakkori and Teddlie (2003a; 2003b) propose a fourth, deriving element from these three known as the Pragmatic paradigm. Consequently, while some current studies have acknowledged four main research philosophies which are Positivism, Pragmatism, Interpretivism

(Constructivism) and Realism (Dudovskiy, 2018; Kivunja & Kuyini, 2017) others such as Creswell (2014) classify them into Positivism, Constructivism (Interpretivism), Transformative and Pragmatism. The study discusses these worldwide philosophical views subsequently.

3.2.1 Positivism

As first proposed by the French philosopher, Auguste Comte (1798 – 1857), the Positivist paradigm defines a global view to research, which is based on research methods known as the scientific method of investigation. Again Comte (1856) suggested that experimentation, observation, and reason based on experience, the only legitimate means of extending knowledge and human understanding, should, be the basis for understanding human behaviour. Essentially, underlying positivism is the idea that science is the only way to learn about the truth (Dudovskiy, 2018). As a scientific method, it must be noted that it encompasses an experimentation process that explores observations and answers questions and is thus, used to search for cause and effect relationships in nature (Kivunja & Kuyini, 2017). It is usually selected as the ideal global view for research, which seeks to interpret observations in terms of facts or quantifiable units (Fadhel, 2002).

Research positioned in this paradigm relies on deductive logic, hypotheses formulation, and testing, proposing functioning definitions and mathematical equations, calculations, extrapolations, and expressions to derive conclusions (Kivunja & Kuyini, 2017). Consequently, it seeks to provide explanations that lead to predictions based on measurable results underpinned by four assumptions: determinism, empiricism, parsimony, and generalizability as explained by Cohen, Manion, and Morrison (2000). The literature points out that positivism supports a quantitative methodology and generally utilizes a hypothesis approach, which is then tested empirically, as the ontological perspective dictates which objective inquiry provides a valid and predictive knowledge of external reality (Zahra & Ryan, 2005).

3*.2.2 Interpretivism (Constructivism)*

Interpretivism philosophy consists of researchers interpreting the subjects of the study. Thus, interpretivism incorporates human interest into a study. The dominant effort of the

Interpretivism paradigm is to understand the subjective world of human experience (Guba & Lincoln, 1989; Creswell, 2014). According to Kivunja and Kuyini (2017), this approach makes an effort as it were to 'enter the head of the subjects being studied,' to understand and interpret what the subject is thinking or the meaning she or he is making of the context. Every effort is expended to try to understand the perspective of the subject under observation, rather than the observer's perspective. In this instance, the understanding of the individual, and their interpretation of the world around them is emphasized. Thus, the main rule of the interpretive paradigm is that reality is socially constructed (Bogdan & Biklen, 1998).

Consequently, philosophers of interpretivism assume that reality, whether given or socially constructed, is only accessed through social arrangements aspects such as communication, perception, shared connotations, and mannerisms (Dudovskiy, 2018; Myers, 2008, Saunders, Lewis & Thornhill, 2010). One dominant feature of this paradigm is that the theory is grounded on data generated by the research act; thus, it does not precede research but follows it. Thus, data are gathered and analyzed in a fashion consistent with grounded theory (Strauss & Corbin, 1990). This accounts for the reason why this paradigm is also referred to as the *Constructivist paradigm.* This paradigm adopts a *relativist ontology*, a *subjectivist epistemology*, a *naturalist methodology*, and *balanced axiology*. Since the development of the interpretivism philosophy is based on the critique of positivism in social sciences, it emphasizes qualitative analysis over quantitative analysis.

3.2.3 Pragmatism

The Pragmatism research philosophy accepts theories to be germane only if they support action. Pragmatics usually acknowledge that there are a variety of ways of interpreting the world and undertaking research and posit that no single viewpoint can ever give the complete picture and that there may be different realities (Saunders, Lewis & Thornhill, 2012). This paradigm emerged among philosophers who argued that it was not possible to access what is the truth about the real world solely by a single scientific method as advocated by the Positivist paradigm (Kivunja & Kuyini, 2017); in this regard, the emphasis is on understanding the individual and their interpretation of the world around them. They advocated that it was not possible to determine social reality through understanding the society or an individual and their interpretation of the world around them as constructed

under the interpretivism paradigm. Consequently, in the view of the pragmatists, a mono-paradigmatic orientation of research was not good enough.

Other philosophers, on the other hand, have argued that what is instead needed is a global view which would provide methods of research that are seen to be most appropriate for studying the phenomenon at hand (Alise & Teddlie, 2010; Biesta, 2010; Creswell, 2003; Tashakkori and Teddlie, 2003, 2010; Patton, 1990). Hence, these philosophers looked for methods to research that could be more practical with diverse approaches which could allow a blend of methods. This together could provide insight into the actual *behaviour* of participants, the *principles* that stand behind those behaviours, and the *consequences* that are likely to follow from different behaviours. This has led to a paradigm that supports the use of mixed methods as a pragmatic way to understand human behaviour, which is the *Pragmatic paradigm.*

The paradigm considers a *relational epistemology* (relationships in research best determined by what the researcher believes applies to that particular study) and *a non-singular reality ontology* (that all persons have their distinct interpretations of reality, and there is no singular reality). It also looks at a *mixed-methods methodology* (a blend of quantitative and qualitative research methods), and *value-laden axiology*, which is research that benefits a person (Creswell, 2014; Kivunja & Kuyini, 2017). This philosophy, therefore, basically supports the mixed method of research.

3.2.4 Realism

According to Johnson & Christensen (2010), the Realism philosophy is also an important philosophy based on the interdependency of human principles and beliefs and focuses on the beliefs that exist in the environment. This research philosophy depends on the idea of independence of reality from the human mind, believes in the existence of an external and objective reality that impacts people's social interpretations and behaviour. It also believes that the human being is not the object for the study in the style of natural science, thereby defining how individuals react towards a real-world situation (Johnson & Christensen 2010). Underlying this philosophy is the assumption of a scientific approach to the development of knowledge.

Prior research divides realism into two groups, namely direct and critical. Direct realism, also referred to as naive realism, can be described as "what you see is what you get" in other words, it portrays the world through personal human senses (Saunders, Lewis & Thornhill, 2010). On the other hand, critical realism proposes that humans do experience the sensations and images of the real world. However, these sensations and images of the real world, according to this philosophy, can be misleading and often do not portray the real world (Novikov & Novikov, 2013). Direct realists accept the world as relatively static and focus on only one level, be it an individual, group, or organization, whereas critical realists appreciate the importance of the multi-level study. In this regard, methods chosen for research conducted under this philosophy must fit the subject matter, whether quantitative or qualitative.

3.2.5 Critical Paradigm/Transformative Paradigm

This particular research philosophy paradigm addresses political, social, and economic issues, which lead to social oppression, conflict, struggle, and power structures occurring at whatever levels in society and is thereby situated in social justice issues (Guba & Lincoln, 1988; Mertens, 2015). As it seeks to change politics to confront social oppression and advance social justice in the situation, it is usually called the *Transformative paradigm* (Kivunja & Kuyini, 2017). The Critical paradigm assumes a *transactional epistemology*, (in which the researcher interacts with the participants), an *ontology of historical realism*, especially as it relates to oppression; a *dialogic methodology*, and *axiology* that respects *cultural norms*.

3.3 Research Paradigm

A paradigm is defined by Guba and Lincoln (1994) who are scholars in the field (s) as a basic set of beliefs or global views that guides research action or an investigation. This universal view is the perspective, thinking, school of thought, or set of shared beliefs that inform the meaning or understanding of research data. Similarly, Lather (1986) explains that a research paradigm innately mirrors the researcher's beliefs about the world that she or he lives in and wants to live in constituting the abstract beliefs and principles that form how a researcher sees the world, interprets, and acts within that world. Consequently, a paradigm

tells how meaning is formed from the data gathered in research, based on the individual's experiences and beliefs.

A paradigm, according to Lincoln and Guba (1985), consists of four elements, which are epistemology, ontology, methodology, and axiology. These elements consist of assumptions about human knowledge (epistemology assumptions), about the realities encountered in research (ontology assumptions), procedures, or approach used to gather data (methodology), and the extent and ways one's values influence the research process (axiological assumptions). They comprise the underlying assumptions, beliefs, norms, and values that each paradigm holds, therefore, importantly require a firm understanding to guide the research direction.

It must be noted that these assumptions unavoidably shape how research questions are framed and understood, the methods used, and how the findings of the research are interpreted (Crotty, 1998). As suggested by Saunders, Lewis & Thornhill (2012), a consistent and well-thought-out set of assumptions will constitute a credible research philosophy, which underpins the methodological choice, research strategy, data collection techniques, and analysis procedures. This will allow for a coherent research project design in which all elements of research fit together. These various paradigms are explained subsequently.

3.3.1 Epistemology of a Paradigm

Epistemology in simple terms means knowledge used to describe how we come to know something; how we know the truth or reality. According to Cooksey and McDonald (2011), it refers to what counts as knowledge within the world and concerns the very bases of knowledge – its nature, and forms, how it is acquired, and how it is communicated to other human beings. Schwandt (1997) again defines epistemology as the study of the nature of knowledge and justification, thus asking questions such as: Is knowledge something which can be acquired on the one hand, or is experienced personally? It looks at what the nature of knowledge is, and the relationship between the researcher and the element of research thereby positioning the researcher in the research context to discover additional new things, given what is known (Kivunja & Kuyini, 2017).

Thus, to understand the underpinning epistemology of a paradigm, a crucial question ought to be asked of how we know what we know and which question is the basis for investigating 'truth.' Epistemology is critical because it helps establish the faith imposed on the data collected (Kivunja & Kuyini, 2017). It affects how one goes about uncovering knowledge in the social context that is being investigated through the data collected to add to knowledge or what is already known.

3.3.2 Ontology of a Paradigm

Ontology is an aspect of philosophy concerned with the assumptions made with the belief that something makes sense or is factual and it is the very nature or essence of the social phenomenon being investigated (Scotland, 2012). Kivunja and Kuyini (2017, p.27), refer to it as "the philosophical study of the nature of existence or reality, of being or becoming, as well as the basic categories of things that exist and their relations." They again argue that it scrutinizes the fundamental belief system of the researcher about the nature of being and existence. It is concerned with the assumptions made and underpinned by the belief that something makes sense or is real, or the very nature or essence of the social phenomenon under investigation. It helps researchers to conceptualize the form and nature of reality and what is known about that reality. These philosophical assumptions, concepts, and propositions about the nature of reality are essential to understanding how meaning can be given to the data gathered thereby helping orient a researcher's thinking about the research problem, its significance, and how it might be approached to contribute to its solution.

Given this, ontology is critical to a paradigm as it helps provide an understanding of the things that constitute the world, as known (Scott & Usher, 2004). Consequently, the ontological paradigm seeks to define the real nature of the foundational ideas which constitute themes that are analyzed to make sense of the meaning embedded in research data. It leads to specific questions asked such as: Is there reality out there in the social world or is it a construction, created by one's mind? What is the nature of reality? In this, an effort is made to examine the underlying conviction system and philosophical assumptions by the researcher about the nature of being which is essential for understanding how you make meaning of the data you gather. These realities which are assumptions, concepts, or propositions support orienting the thinking about the research problem, its significance, and

how it might be approached to answer the research question, understand the problem investigated, and contribute to its solution.

3.3.3 Methodology of a Paradigm

Research has identified methodology as the general term used to refer to the research design or approaches, methods, and procedures applied in an investigation that is well planned to find out something (Keeves, 1997). In essence, it defines how the researcher goes about examining the reality related to a specific problem that has been identified. This comprises data gathering, participants, instruments used, and data analysis, which are all parts of the broad field of methodology. The methodology of a study articulates the overall logic and flow of the systematic processes followed in conducting a research project to gain knowledge about a research problem (Kivunja & Kuyini, 2017).

Other elements included in the methodology are the processes used to obtain data, assumptions, limitations encountered, and how they are mitigated or minimized focusing on how we come to know the world or gain knowledge about a part of it (Moreno, 1947, Kivunja & Kuyini, 2017). The selection of a methodology requires asking questions such as: How do I go about gathering the anticipated data, knowledge, and understandings that will enable me to answer my research question and thus make a contribution to knowledge?

3.3.4 Axiology of a Paradigm

Every research requires that ethical issues are considered and this is referred to as the axiology of the research paradigm. The axiology of the study involves defining, evaluating, and understanding concepts of right and wrong behaviour relating to the research. It considers the different aspects of research, the participants, the data, and the audience to which a report is made on the results of the research and what value should be attributed to it (Kivunja & Kuyini, 2017). It also questions the regard for human values of each individual that will be involved with or participate in the research project and asks questions on its nature of ethics or ethical behaviour. In essence, it lays out the values that will guide the study to be conducted and considers what ought to be done to respect all participants' rights

while addressing issues of risk or harm whether physical, psychological, legal, social, or economic.

Additionally, it sets a foundation for fairness and respect for participants' rights in conducting the study peacefully. It must be noted that the implementation of ethical considerations focuses on four principles that are needed to be upheld when dealing with the participants and data. According to ARC (2015), these principles relate to privacy (respecting the privacy of the participant), accuracy (giving an accurate representation of the view of the participant through crosschecks), accessibility (under what conditions and with what safeguards researchers and participants have access to the data) and property (who will own the data and define any monetary considerations for accessing it).

3.3.5 Choice and Justification of Research Philosophy, Paradigm and Methodology

It is noteworthy that the choice regarding which paradigm underlies a study, as discussed earlier depends on the assumptions that influence the study. As the various types of research philosophies and paradigms have been discussed, this study adopts the Positivist's view as the basis of carrying out this research. This is first because the positivist paradigm supports a quantitative methodology and generally utilizes a hypothesis approach, which is then tested empirically, as the ontological perspective dictates through an objective inquiry to provide accurate and predictive knowledge of external reality (Zahra & Ryan, 2005). Secondly, as already defined, the positivist paradigm is a worldview to research, grounded in what is known in research methods as the scientific method of investigation.

As postulated by Comte (1856) and Creswell (2014), the only authentic means of extending knowledge and human understanding should be experimentation, observation, and reason based on experience which is the source of understanding human behaviour. Since research located in this paradigm derives from deductive logic, formulation of hypotheses, testing those hypotheses, offering operational definitions and mathematical equations, calculations, extrapolations, and expressions, to derive conclusions, it is considered the most appropriate paradigm set for this study. Its ability to provide explanations and make predictions based on measurable outcomes supported by four assumptions explained by Cohen, Manion, and Morrison (2000) to be determinism, empiricism, parsimony, and generalizability helps to understand better the meanings and expectations of research conducted within this paradigm.

As such, the positivist paradigm based on the idea that science is the only way to learn about the truth which depends on quantifiable observations that lead to statistical analyses is therefore adopted in this study.

Additionally, the positivist paradigm, in terms of the four foundational elements or assumptions of a paradigm, in its *epistemology* is said to be objectivist, looking at observable and measurable facts and its *ontology* is naive realism, looking at one factual eternal, independent reality. Again, its *methodology* is experimental, being deductive, highly structured, having large samples, which are measured and is typically a quantitative method of analysis; and its axiology is *beneficence* that is, the researcher is detached, neutral, and independent of what is researched (Kivunja & Kuyini, 2017), in effect, ensuring that the study is conducted taking into consideration the four principles of axiology, privacy, accessibility, property, and accuracy. In this view, since this study aims to examine the relationships among the variables of the research in an objective manner, it is guided by these positivism assumptions which subsequently inform the research design.

3.4 Research Approach and Design

Research design is referred to as the strategy that explains how a study is conducted. It reveals how all of the major parts of the research study such as the samples or groups, measures, treatments, or programs work together in an attempt to address the research questions or hypotheses. The research design can be seen as the realization of logic in a set of procedures that improves the validity of data for a given research problem (Creswell, 2014). According to Mouton (1996, p. 175), the research design serves to "plan, structure and execute" the research to maximize the "validity of the findings" giving directions from the underlying philosophical assumptions to research design and data collection. Yin (2003, p19) further states that “colloquially, a research design is an action plan for getting from *here* to *there*, where ‘here’ may be defined as the initial set of questions to be answered and ‘there’ is some set of (conclusions) answers.”

3.4.1 Types of Research Approaches

There are three research designs namely quantitative, qualitative, and mixed methods approaches. The quantitative research approach was first developed in the natural sciences to provide insight into natural occurrences. It measures variables on a sample of subjects and expresses the relationship between variables using effect statistics such as correlation, relative frequencies, or differences between means with a focus on mainly theory testing (Creswell, 2014). According to Stainback and Stainback (1988), the quantitative research approach serves three fundamental purposes which involve describing, comparing, and attributing causality. This research can be carried out in two main forms; experimental and non-experimental. This approach is theory-based, involves large data, and data is presented numerically.

Similarly, a qualitative research approach was developed in the social sciences to enable scientists to study social and cultural occurrences. In the use of a qualitative research approach, the aims are to understand human behaviour in its natural environment and from the perspective of the study's participants by exploring new topics which require involvement in the settings where people normally live their lives. Some common types of this approach are narrative research, phenomenology, participant observations, ethnographies, case studies, open-ended interviews, and focus groups which all involve observing what individuals do, what they produce, and how they relate verbally and nonverbally at some point. Consequently, this approach is theory forming, involves, interacting with participants at the individual level, uses small data, and analysis is presented in words (Creswell, 2014).

The third research approach is the mixed methods approach. This refers to studies in which the researcher combines both the quantitative and qualitative approaches in a single study and consequently after collecting the data, analyzes and integrates the results drawing inferences from both approaches and methods (Nardi, 2018). In this instance, therefore, the study employs two types of data collection procedures, for example, focus groups and surveys and also both numerical and textual data. The data analysis is again done statistically and thematically thereby drawing two types of conclusions which are objective and subjective with emic and etic representations.

It must however be noted that these three approaches are not as distinct as they first appear and should, therefore, not be seen as opposites or dichotomies. Rather, they represent different ends on a continuum (Creswell, 2012; Newman & Benz, 1998). Differences between them arise due to the underlying philosophical assumptions researchers bring to the study in the types of research strategies used generally such as quantitative experiments or qualitative case studies. The difference also is the result of the specific methods employed in conducting these strategies such as collecting data quantitatively on instruments versus collecting qualitative data through observing a setting or using both either to confirm or complement the study results. Thus, each approach employed depends to a large extent on the type of study being undertaken and the direction of the research.

3.4.2 Justification and Choice of Research Approach

Having discussed the three approaches to research, this study in its design adopts the quantitative research approach, which makes it a deductive study. As stated by Hittleman & Simon (1997, p. 31) "Quantitative research makes use of questionnaires, surveys, and experiments to gather data that is revised and tabulated in numbers, which allows the data to be characterized by the use of statistical analysis". This method of research measures variables on a sample of subjects and expresses the relationship between variables using effect statistics such as correlations, relative frequencies, structural equation modeling, or differences between means with the focus to a large extent on the testing of theory. The quantitative research design is therefore an appropriate method to use as a means for testing objective theories by examining the relationship among variables (dependent and independent) of the study. Choosing the quantitative approach, classified also as empirical research, is most appropriate when an attempt is made to approve or disapprove that certain variables influence the other variables in some way. Results obtained from such empirical studies are considered one of the most robust pieces of evidence for a given hypothesis and can be generalized to the population. Given that this study aims to test theories and formulate hypotheses on the relationships between constructs, the quantitative research approach is appropriate.

Apart from choosing the quantitative research approach due to the direction of the study, another reason for this choice of this study's research approach above the qualitative and mixed-method approaches is the matured literature provided by previous studies, which

provides enough theoretical basis to carry out empirical research in this study. Some studies also propose that scientific thinking and procedures are good options to employ in understanding issues on social scientists' study and complex behaviours (Berry, Carpenter, and Barratt, 2012; Nardi, 2018). In this study, for example, to examine the relationship between employee creativity and CWB, the ideal situation will be to gather data that reflect the real conditions relating to whether individuals engage in CWB. This is however difficult to achieve as it is not easy to evaluate the true state of this behaviour since employees exhibiting these kinds of behaviour would not readily admit to it due to its negativity (Gruys, 1999). Thus, it is not expedient to apply the qualitative research approach in this study of inquiry.

Generally, the mixed method has been proposed as a desirable approach since it combines the benefits of both the quantitative and qualitative approach in a study limiting its weakness (Creswell & Plano Clark, 2011). However, the strong literature from previous research provides an appropriate opportunity to advance theory with the quantitative method in this study. Additionally, juxtaposing the constructs of this study in terms of data collection, analysis interpretation, and validity, the quantitative research approach is the best design option for carrying out an objective inquiry in the context of this study.

3.4.3 Research Methodology

Research Design

In applying the quantitative research approach, this study will employ both descriptive and explanatory analyses as part of its design and data will be collected from target groups for this purpose through surveys. This study begins with undertaking a Pilot Study to explore the possible fit of the data to be collected and its sufficiency in addressing this particular research inquiry. This will help determine the appropriateness of the items in the survey questionnaires for the data collection and its reliability, comprehensiveness, and clarity before distribution to the sample population to ensure it will meet the demands of the study. After that, having gathered data through a survey, a descriptive analysis of this data will be conducted and correlation analysis is used to examine the proposed relationships and underlying theories that exist between the research variables identified by the study hypothesis. As hypothesized, the data analysis will assess the relationships between the antecedents of employee creativity and CWB and the contingent and the moderating effect

of the antecedents of employee creativity on the relationship between employee creativity and CWB.

This method, as adopted, will ensure that the study is objectively carried out since the data collected will be analyzed based on tested theories, which will add to the validity and reliability of the research results. Then again, the design and use of survey questions will ensure there is little personal contact between the researcher and the data sources to address ethical issues and biases in the study. Thus, the survey is undertaken with ethical considerations such as protecting the privacy of the respondents and their anonymity necessary to meet the axiological demands of the research. This is done by seeking consent from respondents to participate and limiting personal information in the design of the survey questions (Podsakoff, MacKenzie, Lee & Podsakoff, 2003).

Study Population and Sample

Population and Sample

The population of this study is employees working in one hundred and ten (110) firms and organizations obtained from the Membership list of the Advertising Industry in Ghana. A survey was used to collect data on a sample of 500 employees from 50 of these firms, which includes both supervisors and subordinates. It must be noted that as the sample size of the study was considered large with 500 respondents, any sampling or selection bias resulting from the sampling procedure will have a minimal effect on the study (Babbie, 2005; Fadem, 2009). Probability purposive sampling was used to select 50 firms from the membership list of the Advertising Association of Ghana, out of which 500 respondents were selected through a simple random sampling technique. This was done by selecting each employee entirely by chance and each member of the population has an equal chance of being included in the sample. This particular sampling was used to make sure that each respondent has the same chance of being selected among employees working in the Creative Units of these firms and organizations. The organizations and firms in the stated selected industry included small, mid-size, and large organizations as given by the organizational size classifications of the Ghana Statistical Service. These ranged from ten (10) employees and below for small organizations or firms, ten (10) to fifty (50) for mid-size organizations, and between fifty (50) and two hundred and fifty employees (250) for large size organizations. Heads of Departments such as Human Resource, Marketing, and Research & Development units

within these organizations and Executive Directors of the selected professional associations were contacted to grant access to respondents and to encourage participation.

Sampling frame and procedure

The study next considered a sampling frame for collecting the data. The sampling frame in this study covered all regions of Ghana and consists of all advertising agencies in Ghana with the sample drawn from the Advertising Association of Ghana (AAG) membership list of firms. It is interesting to note that almost all the advertising agencies are located in Accra, the national capital with only a few having subsidiaries in some of the regional capitals, such as Takoradi and Kumasi. Out of a total of one hundred and ten (110) firms on the membership list, there was only one (1) located in Kumasi and four (4) in Tema, which is about 0.05%. Consequently, the study found it appropriate to limit the sample for data collection to only Accra. Thus, this sample was considered an excellent representation of the population.

The sampling procedure for this study was multi-stage consisting of purposive sampling to select the firms and simple random sampling to select the respondents in the firms. Firstly, purposive sampling was used to select the firms from the membership list of AAG because some of the firms were not willing to participate in the study. Secondly, the majority of the firms were small having few employees below 50 or less with a few large firms. Thus, to ensure the desired number of respondents, the study selected firms capable of giving enough employees from which respondents can be randomly selected. Thereafter at the second stage of the procedure, the contact persons at the firms (either the Managers, Human Resource Managers, or Supervisors) were briefed on the sampling procedure. Out of the list of employees in the firms' creative unit, they were directed to apply a simple random sampling technique to select the respondents. The study, therefore, relied on 50 firms drawn from the advertising industry in Accra as its sample size at the firm level was selected through a purposive sampling technique. Thereafter, the study again selected 500 respondents from these participating firms through a random sampling technique because most of the firms in the advertising industry are small in size, with smaller size creative units and few employees. The study also ensured that the survey respondents are spread across employees in the creative departments and marketing where applicable in these industries since as Shalley, Gilson & Blum (2009) avers creative work characterizes an unusually broad range of employment. It is important to note that only permanent employees of the firms were included in the survey when it came to light that some firms had persons employed on a

contract basis. This was necessary because the study considered the fact that contract employees are not likely to portray the same intense work behaviours or commitment as permanent employees because their services are temporal.

The sample size defined as the total number of elements or units to be included in a study (Saunders, Lewis & Thornhill, 2009) is meant to explain the adequacy of the elements or units that can effectively and adequately be representative of the population of interest. There are several formulas proposed in prior studies (Islam, 2018; Israel, 1992) as well as rules of thumb (Hair, Black, Babin, Anderson & Tatham, 2006) existing for determining sample size adequacy. However, since most of the firms in the advertising industry are small in size, with few employees, the study chose the rule of the thumb determination proposed by Hair et al., 2010 in coming up with the sample size. This sample size of 500 is based on the justification suggested in studies conducted by Hair, Black, Babin & Anderson (2010). In these studies, they posited that where population size is unknown, to get an adequate sample frame, the participants should be 5 - 10 times the number of items used in the questionnaire. Since the questionnaire has 95 variables, the sample frame should have not less than 475 respondents. In other scholarly research, a rough rating scale for adequate sample sizes presented by Comrey and Lee (1992) in factor analysis proposed sample sizes ranging from "100 as poor", "200 as fair", "300 as good", "500 as very good" and "1,000 or more as excellent". They advised selected samples of 500 or more observations whenever possible in factor analytic studies because the larger sample size will minimize the errors likely to occur in generalizing to the population. Therefore, this sample size of respondents was selected for this study in consideration of the limited time available for this study. Respondents were selected from among the employees who will volunteer to take part in that department to ensure enough data is collected. All participants were assured of the confidentiality of the data to be collected, and the participating firms or organizations were assured of access to the results of the data analysis if they so required.

The study initially considered collecting data across the board from employees working in Telecommunication, Advertising, Information, and Communication Technology (ICT), the Banking and Tourism (specifically Travel & Tours firms) industries in Ghana. The focus of the sources of this data would have been the Institute of ICT Professionals of Ghana (IIPGH), the Advertising Association of Ghana (AAG), a bank, three Travel & Tour Companies, and a telecommunication company. The target respondents were sales and marketing employees

in telecommunication and banking, software developers in the ICT industries, designers in advertising, tour operators, and agents in Travel & Tour firms. These sources were however abandoned after the Pilot study because of the difficulty in obtaining the data. In the case of the banking sector, due to the current problems in the sector, which have led to the collapse and dissolution of some banks, employers were not willing to answer the questionnaires and open up on their activities as a corporate institution. Their employees were also not willing, as they wanted to avoid victimization that could lead to a loss of employment. Similarly, the telecommunication companies didn't want to open up about their activity's dues to competition from rival companies while the Travel and Tour firms were usually small firms with not many employees for any meaningful data collection. The study again tried to collect some data from the ICT firms online through a survey form but the response was not forthcoming and so this was abandoned as well. Despite all these, the study focused on the Advertising Agencies mainly because employee creativity has not been well explored in this industry even though creativity is in high demand in this competitive sector.

Data Collection

A survey that consisted of questionnaires for subordinate employees and their supervisors was used to collect data for this study. These are validated questionnaires obtained from previous studies adopted to collect the data. In designing questionnaires for a survey, the research identified one basic factor, common method variance which influences behavioural study results. Common method variance is related to the method adopted in measuring the constructs of the study which when not adequately addressed create a potential problem of errors (Podsakoff et al, 2003). Method bias, which leads to these variances usually, has a likely effect on research findings. As a result of this, common method biases were considered in designing the questionnaires for the study. Various potential sources of method biases arising from the sources of data, construct of the items, and particular measures adopted were procedurally controlled as much as possible in the questionnaire design. These are presented in Table 3.1 below.

Table 3. 1: Common Method Bias and Controls

SOURCES	CONTROLS
Rater Context	Constructs on employee creativity and CWB are rated separately by employees and supervisors to obtain measures from different sources
Measurement context	1. A standard five-point Likert-type scale is adopted for all constructs 2. Scale anchors and formats are straightforward and given maximum clarity 3. Item scale varies sparingly in the questionnaire for personal characteristics and supervisory factors of employee creativity 4. The item scale is the same for employee creativity and CWB in the Employee questionnaire 5. Different item scale in the Supervisor questionnaire for the constructs
Item Context	1. Items are constructed straightforwardly with no embeddedness or 'chameleon effect'. 2. Items are the same for Supervisor and Subordinate rating on employee creativity and CWB
Item Characteristics	Provision of short and clear statements to ensure no item complexity or ambiguity and to minimize consistency motif, social desirability, and leniency biases

Additionally, because not all common method biases can be controlled procedurally, the study statistically again tested for common method variance through the use of Fornell and Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT) criteria (Fornell & Larcker, 1981; Henseler, Ringle & Sarstedt, 2015).

In line with the above, the survey administered a separate questionnaire on all the constructs of the study for the subordinate employee. Another questionnaire was provided for the supervisor to rate only the creativity and CWB of the employees to confirm the creativity and work behaviour of targeted subordinate employees. The survey questions were hand-delivered to the respondents at their various offices. The questionnaires were handed to the contact person, and the procedure for the rating was explained. Subordinate employees were first asked to respond to the employee questionnaires, and after that hand submit it to their supervisors to rate to them on their creativity and CWB on the separate supervisor questionnaire already given to the Supervisor. The employees did not see the supervisor's

questionnaire handed directly to them and were not informed about the rating to be done by their supervisors so knew the supervisor was only gathering the questionnaires for the study. The supervisor was directed to attach a copy of his questionnaire to that of the employee questionnaire as he or she submitted the completed questionnaire and rate each employee. The two sets were then clipped together and delivered to the contact person at the firm or organization for collection. This was to ensure the matching of the subordinate rated questionnaire and the supervisor questionnaires. The items in the questionnaires were close-ended statements based on similar statements, which applied in earlier studies conducted in this domain for the independent and dependent variables while the demographic data had both open-ended and closed-ended statements and questions.

To make certain the questionnaire content and ensure complete data was collected, a Pilot Survey was conducted. This survey focused on respondents from some selected firms and organizations in the advertising industry and a maximum of fifty respondents comprising of both employees and their supervisors were asked to respond to the questionnaires. This pilot survey enabled the study to test the strength of the survey questionnaires in providing suitable data which, when analyzed, will adequately test the proposed hypothesis and establish the validity and credibility of the measurement scales.

3.5 Measures of Constructs

Respondents answered items that measure counterproductive work behaviour, employee creativity, and personal factors such as role identity, self-efficacy and, learning, and performance orientation. Others are supervisory factors such as role ambiguity, transformation leadership, achievement orientation, output, and process controls. The survey also provided a measure for the control variables such as job complexity and incentives and demographic data on age, gender, position in the organization, educational level, and the number of years of employment for the employees. Data was again obtained on the firm/organization size and level of competition. The measures of scale only varied slightly across constructs where necessary to suit the items under each variable and also differed for the ratings by supervisors and employees. This adopted scales of measures for items for the constructs and the different sources of the items together with the large sample size of 500 respondents ensured common method bias is minimized (Podsakoff, Scott, MacKenzie & Lee, 2003).

Similarly, collecting the data for the variables' characteristics and supervisory factors through self-report and other-report (supervisors) served the purpose of enhancing data reliability. Considering the theoretical assumptions underlying the independent and dependent variables that influence the relationships hypothesized, data was also collected on control variables for the other organizational and employee factors, which influence this relationship. Some data collected for the control variables were measured with a combination of categorical and ratio scales, while the Likert scale was used for others, such as job complexity and incentives.

The measures for each construct are presented in Table 1, which indicates the number of items measurement and their sources. Generally, these are widely accepted and validated scale measurements and items, which have been adopted in similar studies globally. For instance, these items and scales have been adopted by Boakye (2013), Arthur (2016), and recently by Amoah & Mdletshe (2021) in their studies on employee creativity in Ghana. The questionnaire containing the list of constructs and items for each construct is attached as Appendix A to the study.

Table 3. 2: Table of Constructs, Number of items and Sources

Construct	**Number of items**	**Sources**
Counterproductive work behaviour	Twelve items	Gruys (1999); Hollinger & Clark (1983a); Raelin, 1994; Robinson & Bennett, 1995
Employee creativity	Thirteen items	Tang & Chang (2010); Zhou & George (2001), Arthur (2016)
Self-efficacy	Seven items	Tang & Chang (2010); Bandura, (1977a)
Role identity	Five items	Siebert & Siebert (2005)
Learning orientation	Six items	VandeWalle (1997)
Performance orientation	Five items	VandeWalle (1997)
Role ambiguity	Seven items	Rizzo, House & Lirtzman (1970)
Transformational leadership	Ten items	Jaiswal & Dhar (2014); Bass & Avolio (1990)
Process control	Eight items	Atuahene-Gima & Haiyang (2002); Jaworski & MacInnis, 1989
Output control	Seven items	Atuahene-Gima & Haiyang (2002); Jaworski & MacInnis, 1989
Achievement orientation	Four items	Atuahene-Gima & Haiyang (2002); Oliver & Anderson (1994).
Job complexity	Four items	Zacher & Frese (2011); Morgeson & Humphrey (2006)
Work incentives	Seven items	Al-Nsour (2011)

It is important to note that all the variables were measured on a five-point Likert-type scale that focuses on employee work behaviour, creativity, personal characteristics, and the effect of supervisory factors. The variables for employee creativity were measured by respondent supervisors rating the employee on a scale of 1 – "Not at all characteristics" to 5 – "Very characteristics" while the employee rated themselves as respondents on a scale of 1 – "No extent" to 5 – "To a large extent." This data was collected from the employee's supervisor to confirm the creativity of the employee. Similarly, variables for the employee's counterproductive work behaviour and self-efficacy are also rated on a scale of 1 – "No

extent" to 5 – "To a large extent." Role ambiguity, on the other hand, is measured on a scale of "Very true" to 5 – "Very false" whereas the rest of the variables for the constructs namely learning and performance orientation, role identity, process and output control, achievement orientation and transformational leadership are measured using a scale of 1 - "Strongly disagree" to 5 – "Strongly agree".

Data was additionally collected on some control variables such as job complexity and work incentives, which are also rated on the same scale of 1 - "Strongly disagree" to 5 – "Strongly Agree." Previous studies have suggested that these factors influence employee creativity (Amabile, 1988; Hackman & Oldham, 1980). This is because when faced with complex and challenging work, employees will likely have greater motivation to engage in creative activities, unlike employees engaged in regular and straightforward jobs (Oldham & Cummings, 1996). These variables are also envisaged to affect employee creativity in the presence of some personal and supervisory factors such as self-efficacy and role ambiguity. Similarly, these same factors were controlled for employee counterproductive work behaviour in the light of the role they play as organizational constraints that interfere with situations and events at work and impact job performance (Fida, Paciello, Tramontano, Fontaine, Barbaranelli, & Farnese, 2014).

The study noted that demographic differences and factors may yet again have a controlling effect on employee creativity, which includes age, gender, and level of work experience (Madjar, Oldham & Pratt, 2002). Others are educational background and the position of the employee in the organization. These control variables were measured according to their categories such as gender (1 – "male", 2 – "female"), age (in years at intervals of 10) beginning from 1 = "20 – 30" to 4 = "51 and above" and educational level (1 - ''Master's degree,'' 2 - ''Bachelor's degree,'' 3 - ''Higher National Diploma,'' 4 - ''Diploma'', 5 – "Senior High School" and 6 – "others"). Similarly, because some positions may give employees further opportunities to engage in creative activities (Oldham & Cummings, 1996), positions were measured at three grade levels of 1 – "Supervisor", 2 – "Senior staff" and 3 - "Junior staff" while experience will be measured in terms of years in service ranging from 1 = "1 – 5", 2 = "6 – 10", 3 = "11 – 15", 4 = "16 – 20" and 5 = "above 20". Details of all the variables used in the measurements are attached as an appendix.

3.6 Pilot Survey – Description and Results

A Pilot Test conducted for the study utilized data collected from fifty (50) employees and their supervisors from across (6) firms. This method ensured that the data would not be influenced in any way by the researcher since there will be no direct contact with the participants. An examination of the initial results showed that some items had low loadings into the constructs they were intended to measure thus leading to low average variance extracted whereas some other constructs had significant cross-loadings into other constructs thus affecting discriminant validity. The original and revised item loadings matrices are attached as Appendix 3B. The offending items were deleted sequentially until acceptable construct measures were obtained (Hair, Sarstedt, Hopkins & Kuppelwieser, 2014). The Reliability and Convergent Validity of the data upon the analysis provided results as shown in Table 2 below. The Cronbach Alpha and Composite Reliabilities exceeded the recommended minimum for the constructs ranging from 0.72 to 0.99 for this Pilot Test. Similarly, the Average Variance Extracted (AVE) estimates were above 50%. All these give evidence of adequate Convergent Validity and Reliability of the construct measures (Hair, Hult, Ringle & Sarstedt, 2016).

Table 3. 3: Convergent Validity and Reliability of Constructs

Construct	**The initial, final number of scale items**	**Item**	**Loadings**	**Cronbach's Alpha**	**Composite Reliability**	**AVE**
Counter-Productive Work Behaviour	12,9	Intentionally do slow or sloppy work	0.632	0.938	0.949	0.677
		Leave work early without permission	0.866			
		Play computer games during work	0.918			
		Disobey supervisor's instructions	0.829			
		Lie to the employer or supervisor to cover up a mistake	0.784			
		Waste company materials intentionally	0.871			
		Discuss confidential matters with unauthorized personnel within or outside the organization	0.788			
		Spend time on the internet for reasons not related to work	0.731			
		Take cash and property belonging to the company	0.940			
Employee Creativity	13,7	You come up with new ways and practical ideas to improve performance	0.855	0.874	0.9	0.564
		You search out new technologies, processes, and or product ideas	0.676			
		You suggest new ways to increase the quality	0.743			
		You often have new and innovative ideas	0.74			
		You often have a fresh approach to problems	0.760			
		You suggest new ways of performing work tasks	0.655			
		You suggest new ways to achieve goals or objectives	0.809			
Achievement orientation	4,3	My supervisor shows that he/she has confidence in my ability to meet most objectives	0.810	0.831	0.898	0.746
		My supervisor consistently sets challenging goals for me to attain	0.929			
		My supervisor encourages continual improvement in my performance	0.848			

Age	1,1	NA	1	1	1	1
Education	1,1	NA	1	1	1	1
Experience	1,1	NA	1	1	1	1
Gender	1,1	NA	1	1	1	1
Job complexity	4,3	My tasks are extraordinary and particularly difficult	0.997	0.998	0.999	0.996
		I use all my knowledge and skills in my work	0.999			
		I learn new things in my work	0.998			
Learning orientation	6,6	I often read materials related to my work to improve my ability	0.751	0.878	0.906	0.618
		I am willing to select a challenging work assignment that I can learn a lot from	0.783			
		I often look for opportunities to develop new skills and knowledge	0.817			
		I enjoy challenging and difficult tasks at work where I'll learn new skills	0.762			
		For me, the development of my workability is important enough to take risks	0.796			
		I prefer to work in situations that require a high level of ability and talent	0.806			
Output control	7,4	My pay increases and other benefits depend on the degree to which I achieve specific goals	0.998	0.999	0.999	0.997
		My direct supervisor monitors the extent to which I achieve my performance goals	0.999			
		I receive feedback from my direct supervisor on the extent to which I achieve my performance goals	0.999			
		My job has specific performance goals	0.998			
Performa-nce orientation	5,4	I would rather prove my ability on a task that I can do well at than to try a new task	0.713	0.718	0.809	0.516
		I am concerned with showing that I can perform better than my co-workers	0.677			
		I try to figure out what it takes to prove my ability to others at work	0.675			

		I enjoy it when others at work are aware of how well am doing	0.801			
Position	1,1	NA	1	1	1	1
Process Control	7,6	My pay increase and other tangible rewards depend on how well I follow work procedures	0.670	0.867	0.896	0.592
		My immediate supervisor monitors the extent to which I follow established procedures	0.816			
		My immediate supervisor evaluates procedures I use to accomplish the task of working	0.760			
		My immediate supervisor modifies the procedures if desired results are not obtained	0.676			
		Primary weight in evaluating employees' performance is placed on work behaviour	0.787			
		Employees are accountable for their actions in work performance regardless of the results they achieve	0.883			
Role Ambiguity	7,3	I have to "feel my way" in performing my duties	0.999	0.998	0.999	0.997
		I am uncertain how my work is linked	0.999			
		I do not know if my work will be acceptable to my boss	0.998			
Role Identity	4,1	Colleagues generally turn to me when they have problems	1	1	1	1
Self-Efficacy	7,7	Keep tough problems from getting you down	0.741	0.871	0.903	0.61
		Bounce back after you tried your best and failed	0.841			
		Get yourself to keep trying when things are going bad	0.828			
		Keep your spirit when you suffer hardship	0.824			
		Get rid of self-doubts after you have tough setbacks	0.678			
		Overcome discouragement when nothing you try seems to work	0.760			
Transformati-onal leadership	10,9	My supervisor expresses his/her confidence that we will achieve our goals	0.688	0.922	0.934	0.615

		My supervisor has a strong purpose	0.862			
		My supervisor articulates a compelling vision of the future	0.865			
		My supervisor talks optimistically about the future	0.879			
		My supervisor seeks differing perspectives when solving problems	0.857			
		My supervisor re-examines critical assumptions, whether they are appropriate	0.692			
		My supervisor spends time teaching and coaching me	0.765			
		My supervisor suggests new ways of doing work	0.693			
		My supervisor helps group members to develop their strengths	0.722			
Work incentives	7,3	My organization provides bonuses for workers according to their post and consistent with their level of performance	0.894	0.882	0.927	0.81
		My organization provides overtime payments to employees after working hours.	0.931			
		My organization provides financial incentives to employees when they work professionally.	0.873			
Note: All t-values are significant at 0.01 level of significance						

In the case of the Discriminant Validity of the data, it was assessed using both Fornell and Larcker Criterion and HTMT as shown in Tables 2 and 3, respectively. The constructs/variables showed low to moderate correlations between them. These findings reveal that the square root of the minimum average variance extracted is higher than the largest inter-construct correlation, therefore; discriminant validity has been established (Fornell and Larcker, 1981). About variance-based Structural Equation Modelling, Henseler, Ringle & Sarstedt (2015) argued that the Fornell and Lacker criterion alone is not conclusive on discriminant validity. This is evidenced by three Heterotrait-Monotrait Ratio (HTMT) criteria they provided for determining discriminant validity: HTMT specificity ratio of 0.90, HTMT specificity ratio of 0.85 and HTMT inference score ranging from -1 to 1 ($-1 < HTMT < 1$) as an indication of distinctiveness. From Table 3, all the HTMT correlations fall were all below 0.85; thus, discriminant validity has been established for the nineteen-construct model.

Table 3. 4: Discriminant Validity of Reflective Constructs (Square root of AVEs in diagonal-bold) - Fornell & Larcker Criterion

Construct	Fornell-Larcker Criterion																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Counter Productive Work Behaviour	**0.823**																	
2. Employee Creatitivity	-0.532	**0.751**																
3. Achievement orientation	-0.435	0.195	**0.864**															
4. Age	0.017	0.001	-0.049	**1.000**														
5. Education	-0.042	0.087	-0.016	-0.045	**1.000**													
6. Experience	0.438	-0.438	-0.219	-0.157	0.226	**1.000**												
7. Gender	0.065	-0.102	0.061	-0.199	-0.152	0.233	**1.000**											
8. Job complexity	-0.077	0.144	0.070	0.172	0.370	-0.022	-0.135	**0.998**										
9. Learning orientation	-0.492	0.493	0.026	-0.067	-0.086	-0.056	-0.066	0.057	**0.786**									
10. Output Control	-0.063	-0.165	-0.026	-0.132	-0.020	-0.029	0.145	-0.017	0.058	**0.999**								
11. Performance orentation	-0.256	0.195	0.150	-0.165	0.485	0.121	-0.121	0.222	0.125	-0.133	**0.718**							
12. Position	-0.065	-0.128	0.105	0.032	-0.164	-0.042	0.242	-0.039	0.004	-0.037	-0.256	**1.000**						
13. Process Control	-0.268	0.041	0.359	-0.101	0.113	0.061	-0.121	0.204	0.103	0.088	0.173	-0.082	**0.769**					
14. Role Ambiguity	0.149	-0.032	-0.121	-0.126	0.383	-0.023	0.151	0.006	-0.049	-0.028	-0.089	-0.033	-0.231	**0.998**				
15. Role identity	-0.296	0.353	-0.057	0.182	0.028	0.126	0.002	0.163	0.372	-0.129	0.103	0.026	-0.016	0.029	**1.000**			
16. Self-Efficacy	-0.542	0.543	0.326	-0.100	-0.163	-0.354	-0.032	0.245	0.485	-0.011	0.113	0.175	0.122	-0.126	0.325	**0.781**		
17. Transformational leadership	-0.478	0.248	0.653	-0.204	0.202	-0.145	-0.137	0.051	0.256	0.018	0.367	-0.157	0.398	-0.112	-0.093	0.322	**0.784**	
18. Work incentives	0.079	-0.202	0.370	-0.011	0.385	0.041	0.055	0.232	-0.387	0.000	0.104	-0.037	0.483	0.226	-0.187	-0.154	0.216	**0.900**

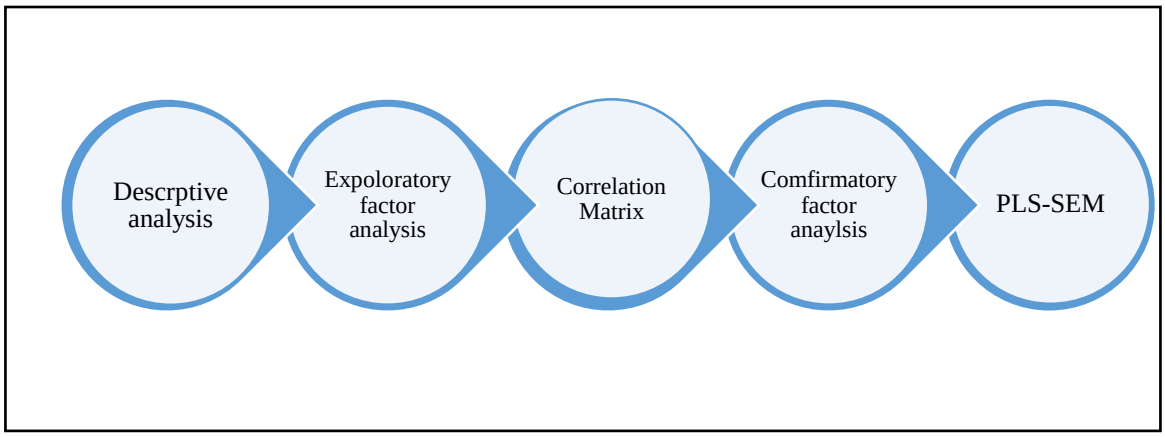
Table 3. 5: Discriminant Validity of Reflective Constructs-HTMT Criterion

Construct	Heterotrait-Monotrait Ratio (HTMT)																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Counter Productive Work Behaviour																		
2. Employee Creatitivity	0.537																	
3. Achievement orientation	0.483	0.220																
4. Age	0.069	0.085	0.055															
5. Education	0.106	0.120	0.022	0.045														
6. Experience	0.447	0.475	0.242	0.157	0.226													
7. Gender	0.127	0.189	0.124	0.199	0.152	0.233												
8. Job complexity	0.077	0.192	0.080	0.169	0.372	0.020	0.137											
9. Learning orientation	0.515	0.526	0.127	0.073	0.147	0.058	0.083	0.111										
10. Output Control	0.086	0.207	0.039	0.132	0.020	0.029	0.145	0.018	0.151									
11. Performance orentation	0.270	0.210	0.191	0.198	0.599	0.205	0.241	0.264	0.261	0.185								
12. Position	0.087	0.144	0.108	0.032	0.164	0.042	0.242	0.040	0.040	0.036	0.303							
13. Process Control	0.249	0.189	0.442	0.134	0.145	0.115	0.138	0.215	0.158	0.152	0.330	0.082						
14. Role Ambiguity	0.225	0.129	0.235	0.127	0.383	0.024	0.151	0.014	0.056	0.028	0.125	0.033	0.252					
15. Role identity	0.305	0.363	0.133	0.182	0.028	0.126	0.002	0.160	0.393	0.129	0.102	0.026	0.136	0.029				
16. Self-Efficacy	0.582	0.609	0.378	0.181	0.175	0.362	0.131	0.266	0.560	0.065	0.209	0.188	0.191	0.182	0.352			
17. Transformational leadership	0.493	0.274	0.774	0.190	0.220	0.161	0.166	0.103	0.325	0.189	0.401	0.171	0.439	0.115	0.151	0.344		
18. Work incentives	0.138	0.244	0.428	0.019	0.410	0.058	0.059	0.244	0.427	0.118	0.288	0.128	0.545	0.243	0.201	0.192	0.288	

3.7 Analysis of the Instrument

Having satisfied the requirements that, the survey instrument would collect data fit for the study from the results of the Pilot test conducted, analysis for the primary data was done according to the following procedure:

Figure 3. 1 - Data Analysis Process



Considering the above process, this study first runs a descriptive analysis of the data collected to define primarily the features of the data and obtain simple summaries about the sample and measurements in the survey. This provided valuable insight into the three major characteristics of variables in the data set in terms of distribution, central tendency, and dispersion (Cohen & Holliday, 1996). Following these, the data analysis continued with Exploratory Factor Analysis (EFA) in SPSS to assess and understand the relationship between the structures of the underlying variables and the constructs of the study. EFA is useful for the scale development method of a data set to reduce a large number of indicators to make it more manageable (Gerbing & Anderson, 1988). Mathematically, this was utilized in deriving the overall best number of factors that convey as much information in the observed variables as possible making it an essential tool for determining the number of latent variables within the observed variables. To test for the relationships that exist between the variables, correlation analysis was subsequently run on the data set using SSPS software to achieve these purposes.

The data was again tested for its suitability and quality as required by the data analysis technique adopted in the study. Tests such as Non-response Bias, Common Method

Bias, Sample Size Adequacy, and Normality diagnostics were carried out on the data. Common Method Variance (CMV) refers to the variance in statistical analysis that is ascribed to the measurement method rather than the constructs that the measurement items are supposed to represent (Chang, van Witteloostuijn & Eden, 2010; Podsakoff, Lee & Podaskoff, 2003). CMV can arise from various sources such as the content of specific items, scale type, response format, and the general context. Depending on the source of the CMV, it can be controlled in the development of the items and measures adopted in the gathering of data or employing a statistical analysis. The study has already considered CMV through the development and administration of the study questionnaires and survey in Chapter 3 (3.4.3.3 and Table 3.1). The main assumption of this test is that if a significant amount of CMV exists, one general factor will account for the majority of the total variance among the variables (Fuller, Simmering, Atinc, Atinc & Babin, 2016; Park, Lee & Kim, 2014). Thus, in testing for common method variance bias, Harman (1967) recommends performing Exploratory Factor Analysis (EFA) with the extraction of the only factor. If the factor extracted has less than 50% variance, then common method variance bias is not likely to be a problem with the other. Other authors such as Andersson & Bateman (1997), Podsakoff et al. (2003), and Lings and Greenly (2010) have also adopted this technique.

Similarly, a Confirmatory Factor Analysis (CFA) was carried out on the data to assess the validity of the measures. This was conducted to more rigorously evaluate and refine the uni-dimensionality of the resulting scales given the possible constraints that may arise from internal and external consistencies. Thus, CFA was used to isolate distinct and uncorrelated measurement items from the correlated ones in the measures. This is also another way of addressing any problem of common method variance that may arise (Podsakoff, Scott, MacKenzie, Lee & Podsakoff, 2003). Consequently, confirmatory factor analysis assessed the validity of the measures and reliability of the data collected to answer the research hypotheses.

Partial Least Square – Structural Equation Modelling is chosen for the data analysis because according to literature is the best method for testing data in a multi-level relationship such as what the study is doing. Partial Least Square - Structural Equation Modelling (SEM) is an estimation method that can handle a large number of exogenous and endogenous factors as well as unobserved (latent) variables that are

specified as linear combinations of observed (measurement) factors. Results suggest that PLS-SEM is a useful method or technique for forming prediction equations when there are a large number of explanatory variables, particularly when the random error variance is large. Thus, the data set was analyzed by performing a two-step approach using Partial Least Square Structural Equation Modelling (PLS-SEM). These steps involved a measurement phase, and then a structural phase or path analysis to test the strength of the relationships, as Gerbing & Anderson (1988) recommends. PLS-SEM is a statistical tool that was used to assess the reliability, convergence validity, and discriminant validity of the data collected concerning the hypotheses proposed in this study. Given the many latent constructs in the model, the complex interrelationships among the construct, the theories backing the hypotheses, and the large sample size, this analytical method was adopted for the study. Typically, this analysis was used to test and explain the causal processes generated by the multiple variable relationships the study represents to give a more explicit conceptualization of the theories that underlie and inform the hypotheses in the study. Accordingly, it provided the means to statistically test the hypothesized model sequentially using the component of variables to determine the extent to which it is consistent with the data. Thus, providing grounds for admitting or rejecting the arguments made by the model for the proposed hypothesized relationship among the variables.

The moderator variables were however tested individually because the research model is such that the antecedents of employee creativity (the hypothesized direct effects) are the same as the moderating variables between creativity and counterproductive work behaviour. Thus, the study did not treat antecedents (personal and supervisory factors) as both independent variables to employee creativity and at the same time interact with creativity to affect counterproductive work behaviour in the same model. This is consistent with prior articles on similar complex models that analyzed hypotheses and models in the same manner (e.g. Atuahene-Gima & Li, 2002). Furthermore, due to the complexity of the model, the inclusion of all the hypotheses in one analysis tended to affect the significance of some which will otherwise be significant when handled separately than when tested jointly. Additionally, in expanding on the form of the moderating interactions of the hypotheses, the study followed the procedure recommended by Aiken and West (1991) and plotted low versus high scores on the moderating constructs (one standard deviation below and above the means using

standardized scores) in a graph. In this instance, a blue line was used to represent the mean showing the direction of the relationship, a green line represented one standard deviation above the mean, while a red line represented one standard deviation below the mean. Consequently, the slopes would show evidence of moderation and interaction at some point where they would likely meet and cross in support of the hypothesis.

3.7.1 Data Validity and Reliability

Literature suggests that due to the difficulties faced in measuring constructs in social sciences especially where human nature is the focus, there is the need to address the issue of ensuring that scales developed are in reality measuring what is required. Similarly, the adopted data collection technique must ensure that data is assessed in a way devoid of duplication and has minimal external influences. Thus, it was necessary to test the scales applied in the studies for their validity and reliability in concepts of multivariate data analysis. While reliability tests examined the degree to which data collection techniques and procedures of analysis would yield consistent and reproducible results, validity revealed the extent to which a measurement tool measured what it was supposed to measure (Krabbe, 2017). These tests were essential for the fact, that, for instance, a measurement item may be a valid measure for a specific factor but not be valid for another factor.

Consequently, the data collected was tested for its validity in terms of its Convergent Validity and Discriminant Validity. Convergent validity was examined using the criteria developed by Hair et al. (2016), which required that the Average Variance Extracted (AVE) for each construct should be greater than 0.5. Again, the standardized factor loadings of all the items that make up each construct should not be less than 0.5, and the Composite Reliability (CR) for each construct should be not less than 0.6 (Hair et al., 2014). Similarly, discriminate validity was examined adopting Fornell and Larcker (1981) criterion. This required that each construct has an AVE greater than the square of the corresponding inter-construct correlations. Other tests such as criterion validity, content validity, and face validity were included in the study while preparing the survey and data collection technique by critically assessing the data sources, method of survey, and the results obtained from the pilot survey.

In the case of Reliability, the study tested for internal consistency, which showed how much a set of items that proposed to measure the same construct measure the particular construct (Cronbach Alpha). Another Reliability test utilized Test-Retest to show the likelihood that the measurement scale for a given construct consistently yielded the same output when tested.

3.8 Conclusion

In summary, this chapter has discussed the philosophies underlying the study and gives a general overview of the methodology for carrying out this study. The chapter thus, provides the data collection approaches, instruments, measures and sets out the processes to be followed in collecting the data to answer the research questions. Finally, the chapter provides the procedure for the data which will culminate in testing the study hypotheses.

CHAPTER FOUR

Data Analysis and Results

4.1 Introduction

This chapter presents the results of data analyzed from questionnaires administered on the field. The chapter examines the moderating effects of personal and supervisor factors on the relationship between employee creativity and counterproductive work behaviour. It presents the results on the background information of respondents and also tests the study's conceptual framework using Partial Least Squares Structural Equation Modelling (PLS-SEM) to find answers to the study hypotheses. The SEM procedure involves Confirmatory Factor Analysis of the measurement model, the examination of the structural model and hypothesis testing, examination of the moderated model, and hypotheses testing and observations.

4.2 Demographic Characteristics

This section presents the demographic characteristics of the respondents. Out of a sample size target of 500 respondents for the study, 366 were received from the data collection out of which 359 were useable. The return rate for the data was therefore 73% approximated and the response used in the data analysis was 72% approximated. Key among them are gender, age group, and education as summarized in Table 4.1

4.2.1 Gender of Employee

Out of a total of 359 respondents who participated in the survey, 163 were females who make up forty-five (45%) percent while 196 representing 55% were males. The almost even gender distribution is useful to understand the views of both male and female employees on creativity and counterproductive work behaviour. It also shows an almost fair representation of both female and male employees within the advertising agency sector.

4.2.2 Age Group

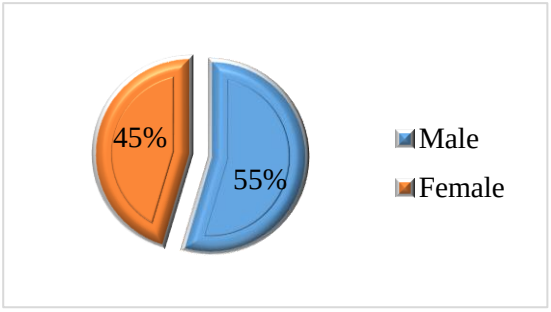
Three in five (60.5%) respondents (employees) were between the ages of 20 and 30 years as shown in Table 4.1. This is followed by those who were between the ages of 31 and 40 years (37%), 41 and 50 years (2.2%), and 50 years and above (0.3%). The findings reflect the fact that the sector under consideration is dominated by youth.

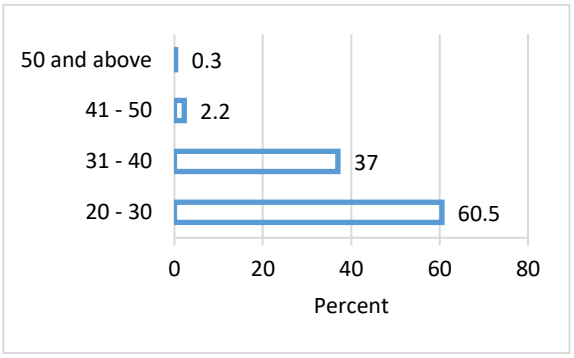
4.2.3 Level of Education

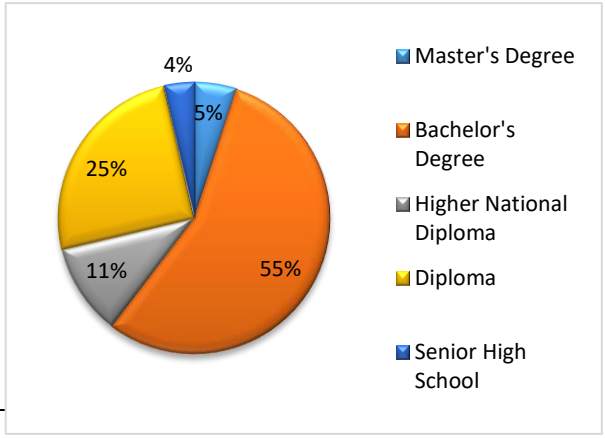
From Table 4.1, fifty-five percent (55%) were Bachelor's Degree holders whereas a further five percent (5%) were Master's Degree holders. One in three respondents were Diploma holders with about 25% having Diplomas whilst 11% had HND. The rest of them had Senior High School education (4%). The findings show that the employees were well educated enough to comment on their experiences regarding creativity and counterproductive work behaviour.

Table 4. 1: Demographic Characteristics

Variables	Frequency (n)	Percentage (%)
Gender		
Male	196	54.6
Female	163	45.4
Total	**359**	**100.0**
Age group		
20 - 30	217	60.5
31 - 40	133	37
41 - 50	8	2.2
50 and above	1	0.3
Total	359	100.0
Level of Education		
Master's Degree	18	5
Bachelor's Degree	199	55.4
Higher National Diploma	39	10.9
Diploma	90	25.1
Senior High School	13	3.6
Total	**359**	**100.0**







Source: Field Data (2019)

4.3 Organizational Characteristics

This section presents the organizational characteristics of the respondents. Key among them includes the name of the organization, grade/level of employee, years with the organization, and position of employee as summarized in Table 4.2

4.3.1 Grade/level of Employee

Seven in ten (69) respondents were the junior staff. This is followed by senior staff (22.8%) and supervisors (8.1%) as shown in Table 4.2. The findings reflect that most of the respondents were junior staff of their respective organizations.

4.3.2 Number of Years of work with the Organization (Work Experience)

Fifty-seven percent (56.8%) respondents had been working with their organizations for a maximum of 5 years as shown in Table 4.2. This is followed by those who have been working for a period between 6 and 10 years, 11 and 15 years (5%), 16 and 20 years (0.6%), and above 20 years (0.3%).

4.3.3 Position in the Organization

About eighty-seven percent (87%) of the respondents classified themselves as subordinates whereas the remaining (13%) were supervisors as shown in Table 4.2.

4.3.4 Firm Size

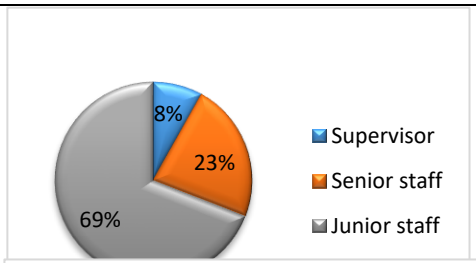
Three in four (76.9%) respondents indicated that their firms had fewer than 50 employees whereas about 8.6% of them claimed their organizations had between 50 and 100 employees. The rest (14.5%) of them claimed the firms had more than 100 employees as shown in Table 4.2.

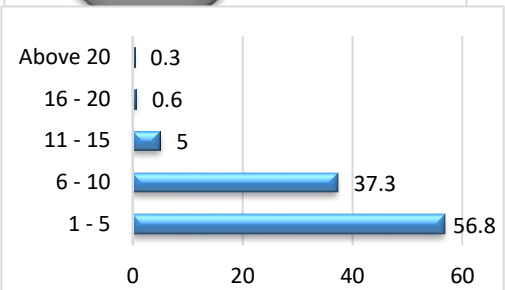
4.3.5 Level of Competition

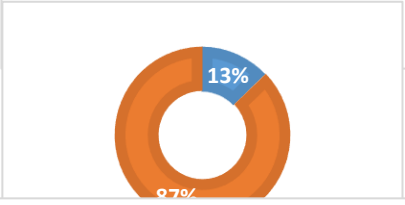
Almost four in five (78%) respondents indicated that their firms were faced with high competition whereas about 21.4% of them cited medium competition with the remaining (0.6%) mentioning low competition as shown in Table 4.2.

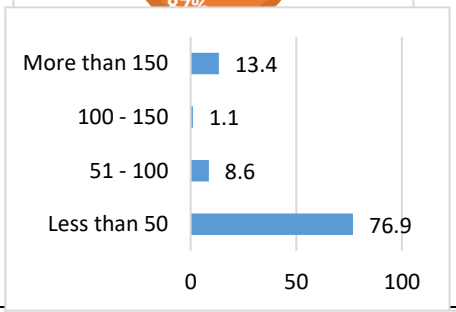
Table 4. 2: Organization Characteristics

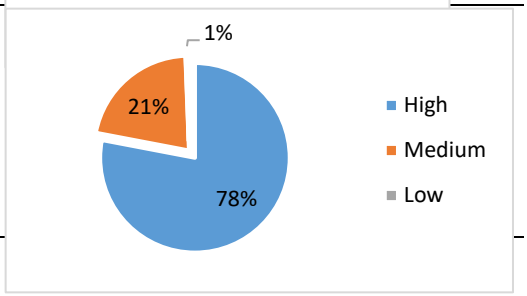
Variables	Frequency (n)	Percentage (%)
Grade or level		
Supervisor	29	8.1
Senior staff	82	22.8
Junior staff	248	69.1
Total	**359**	**100.0**
Years with organization		
1 - 5	204	56.8
6 - 10	134	37.3
11 - 15	18	5
16 - 20	2	0.6
Above 20	1	0.3
Total	359	100.0
Position in the organization		
Supervisor	46	12.8
Subordinate	313	87.2
Total	**359**	**100.0**
Firm Size		
Less than 50	276	76.9
51 - 100	31	8.6
100 - 150	4	1.1
More than 150	48	13.4
Total	359	100.0
Level of Competition		
High	280	78
Medium	77	21.4
Low	2	0.6
Total	**359**	**100.0**











Source: Field Data (2019)

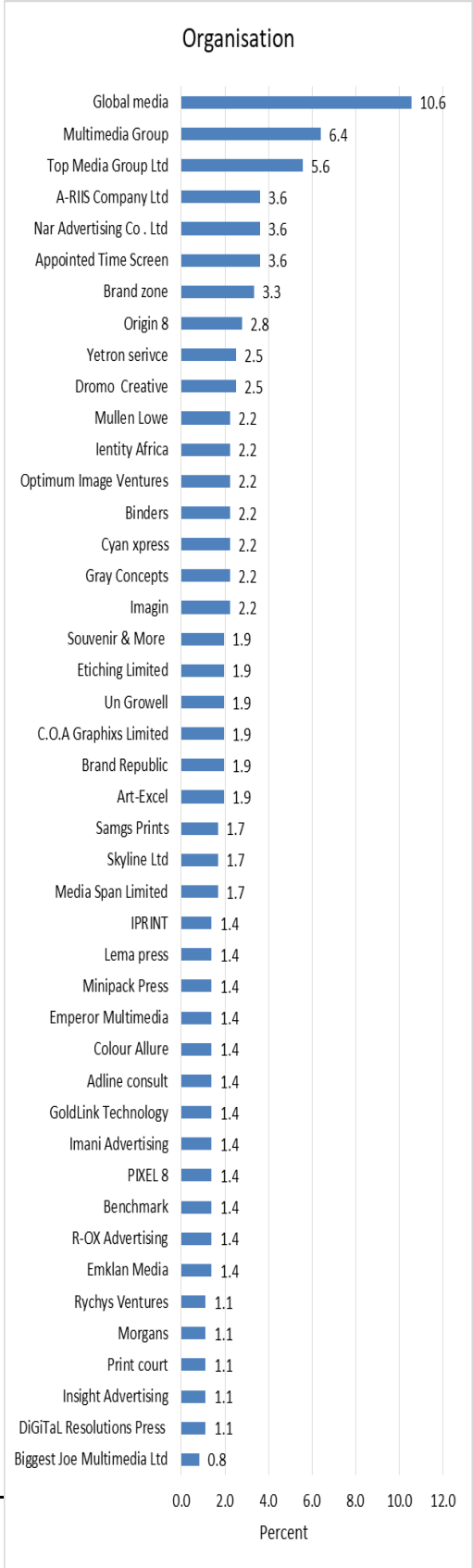
4.3.6 Name of Organization and Services Offered

The three hundred and fifty-nine (359) respondents in this study were sampled from forty-four (44) private advertising and media firms within the Greater Accra Region of Ghana as summarized in Table 4.3. Notable among the firms include Global Media, Multimedia Group, Top Media Group, Nar Advertising Co. Ltd, Yetron Services, Appointed Time Screen, Presbyterian Press Limited, Un Growell, Brand Zone, and

Origin 8, amongst others. The organizations were mainly in the advertising, branding, commercial printing, graphic design, communication, news reporting, television/video content, and Public Relations (PR) business.

Table 4. 3: Name of Organization

Variables	Frequency (n)	Percentage (%)
Name of Organisation		
Appointed Time Screen	13	3.6
Media Span Limited	6	1.7
Nar Advertising Co. Ltd	13	3.6
Emklan Media	5	1.4
R-OX Advertising	5	1.4
Art-Excel	7	1.9
Benchmark	5	1.4
Brand Republic	7	1.9
PIXEL 8	5	1.4
Multimedia Group	23	6.4
C.O.A Graphixs Limited	7	1.9
Imagin	8	2.2
DiGiTaL Resolutions Press	4	1.1
Gray Concepts	8	2.2
Cyan Xpress	8	2.2
Biggest Joe Multimedia Ltd	3	0.8
Insight Advertising	4	1.1
A-RIIS Company Ltd	13	3.6
Binders	8	2.2
Optimum Image Ventures	8	2.2
Print court	4	1.1
Imani Advertising	5	1.4
GoldLink Technology	5	1.4
Dromo Creative	9	2.5
Top Media Group Ltd	20	5.6
Un Growell	7	1.9
Morgans	4	1.1
Adline consult	5	1.4
Yetron service	9	2.5
Colour Allure	5	1.4
Emperor Multimedia	5	1.4
Minipack Press	5	1.4
Eticking Limited	7	1.9
Skyline Ltd	6	1.7
Rychys Ventures	4	1.1
Lema press	5	1.4
Samgs Prints	6	1.7
Brand zone	12	3.3
Origin 8	10	2.8
Global media	38	10.6
Ientity Africa	8	2.2
Mullen Lowe	8	2.2
Souvenirs & More	7	1.9
IPRINT	5	1.4
Total	**359**	**100**



Source: Field Data (2019)

4.4 Descriptive Statistics

This section discusses the descriptive statistics of the thirteen (13) main constructs of the study. Table 4.3 presents the descriptive statistics for the dependent variables of the study including employee creativity and counterproductive work behaviour.

4.4.1 Descriptive Statistics for the Dependent Variables

The two dependent variable constructs including employee creativity and counterproductive work behaviour had questions that were formulated on a 5-point Likert Scale (interval estimation scale) ranging from (1=no extent) to (5= to a large extent). A mean of approximately 4 was obtained for employee creativity among both employees (mean=3.837) and supervisors (mean=3.767), implying that the employees surveyed were generally very creative. On the other hand, a mean of approximately 1 was obtained for counterproductive work behaviour among both employees (mean=1.340) and supervisors (mean=1.346), implying that counterproductive work behaviour among the employees surveyed was generally low. A paired samples t-test conducted between the ratings provided by both employees and supervisors in the aspects of employee creativity and counterproductive work behaviour showed no significant difference between the categories regarding employee creativity and counterproductive work behaviour ($p>0.05$ in both cases), implying that the assessment provided by the employees could be classified as objective. See Table 4.4 for details.

Table 4. 4: Descriptive Statistics for DVs (N=359)

	Employee		**Supervisor**		**Paired samples t-test**	
Dependent Variables	**Mean**	**S.D**	**Mean**	**S.D**	***t***	***p***
Employee Creativity	3.837	0.591	3.767	0.674	1.760	0.080
Counterproductive Work Behaviour	1.340	0.517	1.346	0.482	-0.150	0.880

4.4.2 Descriptive Statistics for the Independent and Some Control Variables

The section provides the descriptive statistics of the nine independent variables and two construct-level control variables. Role identity, learning orientation, performance orientation, process control, output control, transformational leadership, achievement orientation, work incentives, and job complexity all had questions that were formulated on a 5-point Likert Scale (Interval estimation scale) ranging from (1=strongly disagree) to (5= strongly agree). Self-efficacy had questions that were formulated on a 5-point Likert Scale (Interval estimation scale) ranging from (1=no extent) to (5= to a large extent), whilst role ambiguity had questions that were formulated on a 5-point Likert Scale ranging from (1=very false) to (5= very true).

Table 4. 5: Descriptive Statistics for IV and Control Variables (N=359)

IVs and Control Variables	**Min.**	**Max.**	**Mean**	**S.D**
Personal Characteristics				
Role Identity	1	5	3.701	0.673
Self-Efficacy	1	5	3.755	0.678
Learning Orientation	1	5	3.867	0.683
Performance Orientation	1	5	3.270	0.795
Supervisor Factors				
Role Ambiguity	1	5	2.782	0.774
Transformational Leadership	1	5	3.736	0.691
Achievement Orientation	1	5	3.829	0.720
Output Control	1	5	3.433	0.682
Process Control	1	5	3.437	0.676
Control Variables				
Job Complexity	1	5	3.505	0.690
Work Incentives	1	5	3.317	0.768

Note: **significant at p<0.01; Note: benchmark for t-test is 3 (midpoint in the 5-point scale)

Source: Field Data (2019)

4.5 Data Analysis

4.5.1 Partial Least Squares - Structural Equation Model (PLS-SEM)

This study adopted PLS-SEM which is a statistical modeling technique consisting of factor analysis and path analysis or regression. This technique known also as causal modeling or latent variable path analysis makes room for analyzing concurrently direct and indirect causal relationships between unobserved constructs being measured by several observed variables to conclude. PLS-SEM helps researchers undertake complex, multi-dimensional, and better accurate analyses of empirical data. It also considers different facets of happenings in the real world, abstract concepts, and theoretical hypothetical relationships among constructs (Tarka, 2018). Unlike other statistical techniques, it can analyze layers of linkages and relationships among several constructs of both independent and dependent all at the same time. Considering these characteristics of PLS-SEM, the study viewed it as an appropriate technique to analyze the data to achieve the required results for the hypotheses advanced.

4.5.2 Data Suitability/Quality Test

PLS-Structural equation modeling requires satisfying certain data quality criteria to most importantly ensuring the appropriateness of the data for analysis. This section discusses non-response bias, common method variance bias, sample size adequacy, and normality test as necessary investigations before proceeding with PLS-SEM. Details of these procedures are discussed.

4.5.3 Non-response Bias

This survey was completed under some conditions such that the employees were not aware they were also being rated by their supervisors. Furthermore, the researcher followed a similar procedure suggested by Armstrong and Overton (1977) and Lings and Greenly (2010) by comparing the mean values of the questionnaire scale items between respondents who answered the questionnaires early (first week) and those who did so after further follow-up and found no significant difference between the two

categories as shown in Tables A1 and A2 in Appendix A. Therefore, non-response bias was not likely to be a problem with this data.

4.5.4 Common Method Variance Bias

EFA conducted on the survey data with the extraction of only one factor shows that the factor accounts for 17.53% variance (which is less than 50% variance), hence Common Method Variance bias is absent from this data. See the Total Variance Explained Table in Appendix D attached.

4.5.5 Sample Size Adequacy

The number of responses obtained meets the PLS-SEM analysis recommendation proposed by Barclay, Thompson & Higgins (1995). They propose 10 times the number of items in the most complex construct (in this case, employee creativity had 13 original items: therefore, the minimum sample size is 130) or 10 times the number of structural paths directed at a particular construct in the inner model (in this case, counterproductive work behaviour had the highest number of predictors- 17; therefore, the minimum sample is 170). In either scenario, the obtained sample size of 359 for this study meets the minimum sample size requirement for the application of PLS-SEM.

4.5.6 Normality Diagnostics

Normality tests were conducted by examining skewness, kurtosis, Kolmogorov-Smirnov tests, and Shapiro-Wilk test. The test of the normality of questionnaire items is presented in Table 4.7a. and it should be noted that here the items are identified by a few letters reflective of the construct name. Analysis of the scales used in the study questionnaire indicated that nineteen (19) items had kurtosis > ±1.0; whereas thirteen (13) items had skewness > ±1.0. More importantly, the Kolmogorov-Smirnov test of normality showed that $0.166<\alpha<0.51$; $p<0.01$ for all items. Similarly, the Shapiro-Wilk test of normality showed that $0.36<W< 0.91$; $p<0.01$ for all items. These results imply that the data violates multivariate normality assumptions and because normality

assumptions are not applicable in PLS-SEM analysis where no covariance tests are required, this confirms the appropriateness of the usage of PLS-SEM (Hair et al., 2016). The construct-level normality test is also shown below in Table 4.6.

Table 4. 6: Normality Diagnostics

	Mean	**S.D**	**Skewness**		**Kurtosis**		**Kolmogorov-Smirnov**			**Shapiro-Wilk**		
Variables	**Statistic**	**Statistic**	**Statistic**	**Std. Error**	**Statistic**	**Std. Error**	**Statistic**	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Employee Creativity	3.837	0.591	-0.500	0.129	0.750	0.257	0.085	356.000	0.000	0.973	356.000	0.000
Self-Efficacy	3.755	0.678	-0.390	0.129	0.505	0.257	0.085	356.000	0.000	0.975	356.000	0.000
Role Identity	3.701	0.673	-0.453	0.129	1.067	0.257	0.122	356.000	0.000	0.965	356.000	0.000
Learning Orientation	3.867	0.683	-0.108	0.129	0.159	0.257	0.131	356.000	0.000	0.953	356.000	0.000
Performance Orientation	3.270	0.795	-0.466	0.129	0.310	0.257	0.126	356.000	0.000	0.966	356.000	0.000
Role Ambiguity	2.782	0.774	-0.351	0.129	-0.236	0.257	0.128	356.000	0.000	0.963	356.000	0.000
Process Control	3.437	0.676	-0.522	0.129	1.412	0.257	0.098	356.000	0.000	0.966	356.000	0.000
Output Control	3.433	0.682	-0.397	0.129	0.714	0.257	0.106	356.000	0.000	0.977	356.000	0.000
Transformational Leadership	3.736	0.691	-0.424	0.129	0.881	0.257	0.065	356.000	0.001	0.975	356.000	0.000
Achievement Orientation	3.829	0.720	-0.426	0.129	0.905	0.257	0.114	356.000	0.000	0.950	356.000	0.000
Work Incentives	3.317	0.768	-0.256	0.129	0.143	0.257	0.077	356.000	0.000	0.987	356.000	0.002
Job Complexity	3.505	0.690	-0.563	0.129	0.504	0.257	0.154	356.000	0.000	0.958	356.000	0.000
Counterproductive Work Behaviour	1.340	0.517	2.628	0.129	7.799	0.257	0.262	356.000	0.000	0.654	356.000	0.000

4.6 Measurement Model Analysis

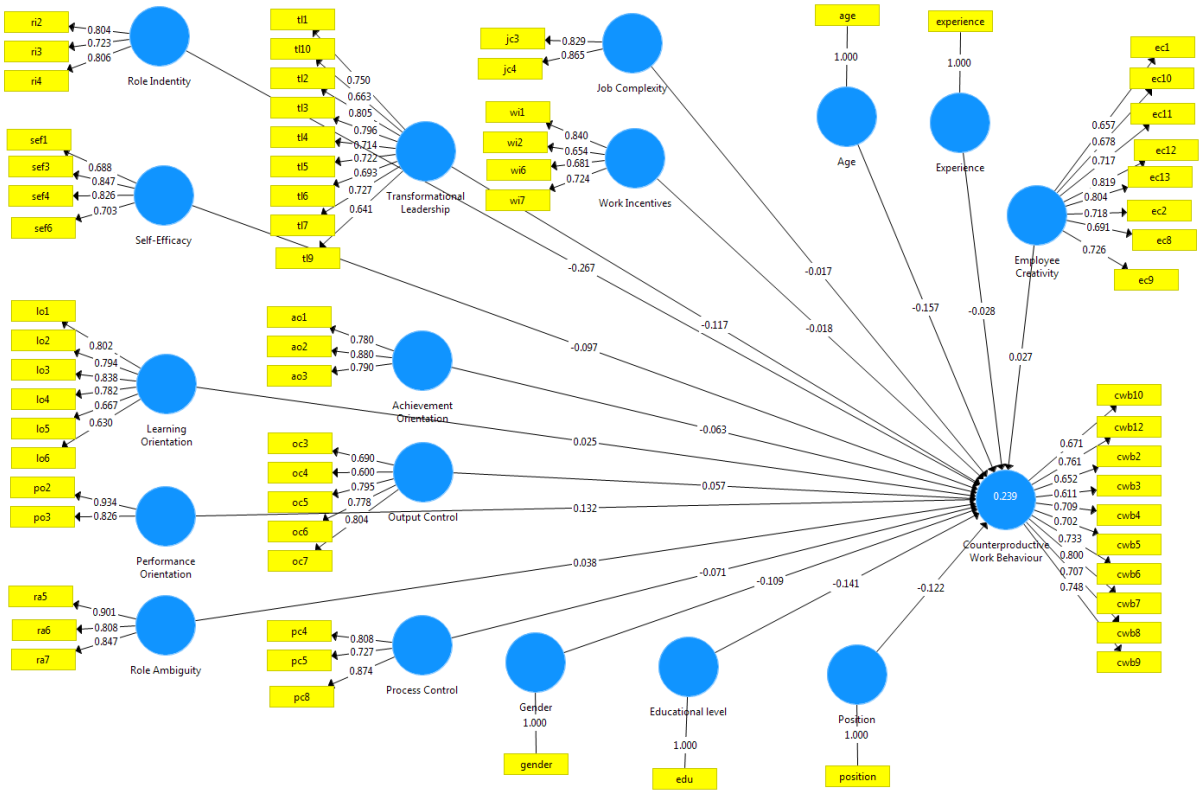
To perform Partial Least Squares -Structural Equation Modelling (SEM) analysis, there are two key stages: the measurement model and the structural model (Hair et al., 2016). The measurement model examines the underlying correlational relationships between the constructs of the study whereas the structural model examines the relationships within the context of the conceptual framework or hypotheses to be tested. Consequently, all variables/constructs were measured such that changes in the latent variables are reflected in the observable variables and the items per construct were interchangeable and highly correlated as is the case in most personality scales (Bagozzi, 2011). The main constructs of the study included the dependent variable counterproductive work behaviour, the independent variable employee creativity, the antecedents of the independent variable made up of role identity, self-efficacy, learning orientation, performance orientation, role ambiguity, transformational leadership, achievement orientation, output control, and process control, and the control variables age, experience, gender, education, and the position shown in Figure 4.1.

It must be noted that the study analyzed the data obtained from the employees' responses. An examination of the initial results showed that some of the reflective items had low loadings whilst others had significant cross-loadings. Those with low loadings were deleted leaving items that were strong to reflect the variables. The offending items include cwb1 ("Conduct personal business during work time") and cwb11 (" Spend time on the internet for reasons not related to work") being indicators measuring counterproductive work behaviour; ec3 ("You suggest new ways to increase quality"), ec4 ("You are a good source of creative ideas"), ec5 ("You are not afraid to take risks"), ec6 ("You promote and champion ideas to others"), and ec7 ("You exhibit creativity on the job when given opportunity") which are indicators to measure employee creativity; ri1 ("It is difficult to tell a supervisor or co-worker I cannot help") an indicator to measure role identity; sef2 ("Bounce back after you tried your best and failed"), sef5 ("Get rid of self-doubts after you have tough setbacks") and sef7("Overcome discouragement when nothing you try seems to work") being indicators to measure self-efficacy; po1 ("I would rather prove my ability on a task that I can do well at than to try a new task"), po4 ("I enjoy it when others at work are

aware of how well am doing") and po5 ("I prefer to work on projects where I can prove my ability to others") which are indicators to measure performance orientation and ra1 ("I have to do things that should be done differently"), ra2 ("I lack policies and guidelines to help me") and ra3 ("I work under incompatible policies and guidelines") being indicators to measure role ambiguity.

Others are tl8 ("My supervisor spends time in teaching and coaching me") an indicator to measure transformational leadership; ao4 ("My supervisor encourages continual improvement in my performance") one of the indicators to measure achievement orientation; oc1 ("My salary increases and other benefits depend on how my performance meets my goals") and oc2 ("I will always have to explain why my performance goals are not met") which are indicators to measure output control; pc1 ("My pay increases and other tangible rewards depend on how well I follow work procedures"), pc2 ("My pay increase and other tangible rewards depend on my knowledge of work procedures"), pc3 ("My immediate supervisor monitors the extent to which I follow established procedures"), pc6 ("Primary weight in evaluating employees' performance is placed on work behaviour") and pc7 ("Employee are accountable for their actions in work performance regardless of the results they achieve") being indicators to measure process control; jc1 ("My tasks are extraordinary and particularly difficult") and jc2 ("I often have to make very complicated decisions in my work") being indicators to measure job complexity); wi3 (My organization provides overtime payment to employees after working hours"), wi4 ("My organization provides financial incentives to employees when they work professionally") and wi5 ("My organization ensures appropriate social security and health insurance for employees") being indicators to measure work incentives. The offending items were deleted sequentially until acceptable construct measures were obtained (Hair et al., 2014).

Figure 4. 1 - Measurement Model Results



Summary: original number of reflective items=94 Revised number of reflective items=62

Source: Field Data (2019).

In using PLS-SEM for data analysis, researchers have been advised to be cautious to report and use model fit in PLS-SEM (Hair et al. 2017). For instance, Lohmöller (1989) argues that some fit measures suggest restrictive assumptions on the residual covariances, which when estimating the model, PLS-SEM does not imply. For instance, certain fit measures adopt a common factor model that requires uncorrelated outer residuals whereas the outer residuals of composite models are not required to be uncorrelated thus, making it inappropriate for PLS-SEM (Hair, Sarstedt & Mingle, 2017). However, indices for CFA have been included in the analysis and explained through other model quality requirements by PLS-SEM such as R-square, Q-square, and f-square under 4.7.1.3 to 4.7.1.5 and in Table 4.15.

Items deleted during CFA: These items were deleted because they had weak loadings and did not adequately reflect and measure the constructs. Thus the deleted items are cwb1 and cwb11 (Indicators to measure counterproductive work

behaviour); ec3,ec4, ec5, ec6, and ec7 (Indicators to measure employee creativity); ri1 (Indicator to measure role identity); sef2, sef5, and sef7 (Indicators to measure self-efficacy); po1, po4 and po5 (Indicators to measure performance orientation); ra1, ra2, ra3 and ra4 (Indicators to measure role ambiguity); tl8 (indicator to measure transformational leadership); ao4 (indicator to measure achievement orientation); oc1 and oc2 (Indicators to measure output control); pc1, pc2, pc3, pc6 and pc7(Indicators to measure process control); jc1 and jc2 (Indicators to measure job complexity); wi3, wi4, and wi5 (Indicators to measure work incentives).

4.6.1 Confirmatory Factor Analysis (CFA)

This section discusses the Confirmatory Factor Analysis (CFA) of the data and how it has been conducted. CFA was used to test if the data collected was consistent with the research model. During CFA, reliability, and validity are usually assessed as part of the estimation of the measurement model. These tests arise because researchers studying human beings often face the challenge of not being certain whether the scales developed are measuring the constructs as they should. Reliability refers to the extent to which data collection methods and analysis procedures will give consistent results upon each reproduction (Krabbe, 2017). Reliability has two main criteria which are Internal Consistency and Test-Retest reliability. While Test-Retest shows the possibility that the measurement scale for a given construct will consistently give the same output when tested, Internal Consistency shows how much a group of items that aim to measure the same construct measure the construct in question (Krabbe, 2017). According to Christmann and van Aelst (2006) and Boateng (2018), the internal consistency of a multiple-item scale is most commonly estimated by Cronbach's Alpha (α).

Furthermore, through CFA, the Composite Reliability (CR) and Average Variance Extracted (AVE) values for each factor in the measurement model were evaluated to further assess the reliability of the survey instrument (Hair et al., 2010). Average Variance Extracted represents the average amount of variance that a construct explains in its indicator variable relative to the overall variance of its indicators (Henseler, Ringle & Sarstedt, 2015). AVE accesses the amount of variance captured by the construct's measures relative to measurement error and the correlations (ϕ estimates)

among the latent constructs in the model. Thus, AVE equals the average squared standardized loadings and it is equivalent to the mean value of the indicator variable. Estimates of 0.50 or higher indicate validity for the construct measure.

Cronbach Alpha (α) on the other hand is the most commonly applied estimate of the internal consistency of a multiple-scale (Christmann & van Aelst, 2006, Boateng, 2018). It is an estimate of the function of the number of items in the adopted scale. It provides a slightly more complex formula for researchers to calculate sample sizes. It has been averred that if Cronbach Alpha is nearer to 1 then the data's reliability is high whereas if it is nearer to 0 then it is not reliable at all (Krabbe, 2017). In other instances, literature asserts that a Cronbach Alpha that falls between 0.7 and 0.9 is considered adequate (Hair et al., 2016). Similarly, Composite Reliability also sometimes known as construct reliability was used to measure the internal consistency in scale items, much like Cronbach's alpha (Netemeyer, 2003). It assumes the total amount of true score variance relative to the total scale score variance is equal (Brunner & Süß, 2005). It also is considered an indicator of the shared variance among the observed variables used as an indicator of a latent construct (Fornell & Larcker, 1981).

Validity looks at the degree to which a measurement mechanism truly measures what it is supposed to measure. There are two main types of validity that researchers need to assess when it comes to SEM and these are Convergent validity and Discriminant validity. Literature avers that the reliability and validity of the scales used in quantitative data analysis must be assessed to ensure that the individual items which come together to form a factor are free from random error and all measure the same attribute (Pallant, 2011). The study therefore in its data analyses undertakes procedures that include a test for Convergent and Discriminant validity for the reflective constructs (Hair et al., 2016). Details are explained as follows:

Convergent Validity

Convergent validity refers to the degree to which a given construct is distinct from other constructs in the framework or model under study. The constructs should be theoretically distinguishable from each other (Kline, 2011). Thus in this study, convergent validity has been used to analyze the data to confirm that the constructs as

measured by the items empirically differ from each other. In instances of convergent validity, Hair et al. (2016) recommend a minimum Cronbach's alpha of 0.6 for exploratory study and a minimum Composite Reliability and Average Variance Extracted (AVE) estimates of 0.7 and 0.5 respectively to ensure adequate convergent validity. Chin (2010) also recommends that each of the item loadings of the reflective constructs should be 0.60 or higher before concluding on adequate convergence validity. Guided by this rule of thumb, the convergent validity and reliability tests for the measurement model are shown in Table 4.7 and consequently discussed for each construct.

Counterproductive Work Behaviour

Counterproductive work behaviour was measured using twelve items and as stated earlier in 4.5, these items originate from the employees' survey questions. An examination of the initial loadings showed that items "cwb1" (Conduct personal business during work time), and "cwb11" (Spend time on the internet for reasons not related to work) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.891, composite reliability of 0.911, and average variance extracted (AVE) estimate of 0.506. These values, therefore, satisfy the thresholds needed to adequately measure the reliability and convergent validity of the construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.800) was the fact that they 'disobey the supervisor's instructions; the one with the least factor loading (0.611) was the fact that they 'intentionally do slow or sloppy work' obtained after testing for Reliability and Convergent Validity.

Employee creativity

Employee creativity was measured using thirteen items and again these items originated from the employees' survey questions. An examination of the initial loadings showed that items "ec3" (You suggest new ways to increase quality), "ec4" (You are a good source of creative ideas), "ec5" (You are not afraid to take risks), "ec6" (You promote and champion ideas to others), and "ec7" (You exhibit creativity

on the job when given opportunity) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.875, composite reliability of 0.900, and average variance extracted (AVE) estimate of 0.530. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). These values, therefore, satisfy the thresholds needed to adequately measure the reliability and convergent validity of the construct to be used in the data analysis. The item with the highest factor loading (0.819) was the fact that they 'suggest new ways of performing work tasks'; and the one with the least factor loading (0.678) was the fact that they 'come up with new ways and practical ideas to improve performance' obtained after testing for Reliability and Convergent Validity.

Role identity

Role identity was measured using four items. An examination of the initial loadings showed that item "ri1" (It is difficult to tell a supervisor or co-worker I cannot help) cross-loaded significantly into other constructs. As a result, the offending item was deleted and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.687, composite reliability of 0.822, and average variance extracted (AVE) estimate of 0.606. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.806) was the fact that they 'characterize themselves as rescuers', and the one with the least factor loading (0.723) was the fact that 'colleagues generally turn to them when they have problems' obtained after testing for Reliability and Convergent Validity.

Self-efficacy

Self-efficacy was measured using seven items. An examination of the initial loadings showed that items "sef2" (Bounce back after you tried your best and failed), "sef5" (Get rid of self-doubts after you have tough setbacks), and "sef7" (Overcome

discouragement when nothing you try seems to work) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.770, composite reliability of 0.852, and average variance extracted (AVE) estimate of 0.592. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.847) was the fact that they 'get themselves to keep trying when things are going really bad, and the one with the least factor loading (0.688) was the fact that they 'keep tough problems from getting them down' obtained after testing for Reliability and Convergent Validity.

Learning orientation

Learning orientation was measured using six items. The six-item scale achieved a Cronbach's alpha of 0.855, composite reliability of 0.888, and average variance extracted (AVE) estimate of 0.571. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.838) was the fact that they 'often look for opportunities to develop new skills and knowledge"; the one with the least factor loading (0.630) was the fact that they 'prefer to work in situations that require a high level of ability and talent' obtained after testing for Reliability and Convergent Validity.

Performance orientation

Performance orientation was measured using five items. An examination of the initial loadings showed that items "po1" (I would rather prove my ability on a task that I can do well at than to try a new task), "po4" (I enjoy it when others at work are aware of how well am doing), and "po5" (I prefer to work on projects where I can prove my ability to others) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run with only the two items left to measure performance orientation. The literature has shown

some studies that have two measure items that used Cronbach's coefficient Alpha (e.g. Salomo, Weise & Gemünden, 2007 p.302; Zhou, Jin & Fang, 2014 p.15). There have been some disagreements on what the most appropriate indicator of scale reliability is when a measure for a construct consists of two items (Eisinga, Grotenhuis & Pelzer, 2012). Sometimes, researchers face a common situation whereby poor quality items have to be removed from a limited set of items which results in scales with a small number of items, sometimes too leading to questions of how to best estimate reliability (Eisinga, Grotenhuis & Pelzer, 2012). Even though Cronbach's coefficient alpha is the most frequently reported reliability statistic for multiple-item scales, and some researchers commonly report this coefficient for their two-item measure (Löwe, Kroenke & Gräfe, 2005; Michal, Zwerenz, Tschan, Edinger, Lichy, Knebel. Tuin & Beutel, 2010; Young, Jeganathan, Houtzager, Di Guilmi & Purnomo, 2009). Nevertheless, other authors claim that coefficient alpha is meaningless and unsuitable for two-item scales (Sainfort & Booske, 2000; Verhoef, 2003) and instead recommend the Pearson correlation coefficient. Others also propose Spearman-Brown's formula for measuring reliability in such instances arguing that the inter-item correlation equals the split-half reliability estimate for the two-item measure (Hulin, Netemeyer & Cudeck, 2001).

Based on these recommendations and going by the argument put forward by Hulin, Netemeyer & Cudeck (2001), for this construct, Spearman-Brown's formula coefficient was adopted to test the reliability of the remaining two items after the deletion in this study since literature suggests Pearson correlation is not a strong and adequate measure of the reliability of a two-item scale (Eisinga, Grotenhuis & Pelzer, 2012). The final retained items achieved Spearman-Brown reliability of 0.726, composite reliability of 0.874, and average variance extracted (AVE) estimate of 0.777. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining two item loadings was statistically significant using bootstrap t-values (5000 sub-samples). Comparatively, item "po2" (I am concerned with showing that I can perform better than my co-workers) had a bigger loading (0.934) than "po3" (I try to figure out what it takes to prove my ability to others at work) obtained after testing for Reliability and Convergent Validity.

Role ambiguity

Role ambiguity was measured using seven items. An examination of the initial loadings showed that items "ra1" (I have to do things that should be done differently), "ra2" (I lack policies and guidelines to help me), "ra3" (I work under incompatible policies and guidelines), and "ra4" (I have to "feel my way" in performing my duties) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.816, composite reliability of 0.889, and average variance extracted (AVE) estimate of 0.727. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.901) was the fact that they are 'uncertain about how their work is linked'; and the one with the least factor loading (0.808) was the fact that they have to 'work under vague directives and orders' obtained after testing for Reliability and Convergent Validity.

Transformational leadership

Transformational leadership was measured using ten items. An examination of the initial loadings showed that item "tl8" (My supervisor spends time teaching and coaching me) cross-loaded significantly into other constructs. As a result, the offending item was deleted and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.889, composite reliability of 0.909, and average variance extracted (AVE) estimate of 0.526. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.805) was the fact that their 'supervisors have a strong purpose'; the one with the least factor loading (0.641) was the fact that their 'supervisors suggest new ways of doing work' obtained after testing for Reliability and Convergent Validity.

Achievement orientation

Achievement orientation was measured using four items. An examination of the initial loadings showed that item “ao4” (My supervisor encourages continual improvement in my performance) cross-loaded significantly into other constructs. As a result, the offending item was deleted and the measurement model was re-run. The final retained items achieved a Cronbach’s alpha of 0.756, composite reliability of 0.858, and average variance extracted (AVE) estimate of 0.669. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.880) was the fact that their ‘supervisors let them know that they are expected to perform at their highest level’; and the one with the least factor loading (0.780) was the fact that their ‘supervisors show confidence in their ability to meet most objectives’ obtained after testing for Reliability and Convergent Validity.

Table 4. 7: Reliability and Convergent Validity

Constructs	Loading	Bootstrap t-values
Counterproductive Work Behaviour (α= 0.891, CR = 0.911, AVE = 0.506)		
Absent yourself from work without permission	0.652	10.620
Intentionally do slow or sloppy work	0.611	9.600
Use sick leave when not really sick	0.709	12.788
Leave work early without permission	0.702	11.213
Play computer games during work time	0.733	17.317
Disobey supervisor's instructions	0.800	23.720
Lie to employer or supervisor to cover up a mistake	0.707	15.221
Wastes company materials intentionally	0.748	16.355
Discuss confidential matters with unauthorized personnel within or outside the organization	0.671	11.839
Take cash and property belonging to the company	0.761	14.509
Employee Creativity (α=0.875; CR=0.900; AVE=0.530)		
You come up with new ways and practical ideas to improve performance.	0.657	6.769
You search out new technologies, processes, techniques, and /or product ideas.	0.718	7.497
You develop adequate plans and schedules for the implementation of new ideas.	0.691	8.317
You often have new and innovative ideas.	0.726	8.417
You come up with creative solutions to problems.	0.678	7.240
You often have a fresh approach to problems.	0.717	7.673
You suggest new ways of performing work tasks.	0.819	11.950
You suggest new ways to achieve goals or objectives	0.804	11.703
Role Identity (α=0.687; CR=0.822; AVE=0.606)		
It is my responsibility to be helpful to my supervisor and co-workers	0.804	15.732
Colleagues generally turn to me when they have problems	0.723	9.747
I characterize myself as a rescuer	0.806	17.459
Self-Efficacy (α=0.700; CR=0.852; AVE=0.592)		
Keep tough problems from getting you down	0.688	11.600
Get yourself to keep trying when things are going really bad	0.847	34.247
Keep your spirit when you suffer hardship	0.826	25.770
Keep from being easily rattled	0.703	11.513
Learning Orientation (α=0.855; CR=0.888; AVE=0.571)		
I often read materials related to my work to improve my ability	0.802	16.338
I am willing to select a challenging work assignment that I can learn a lot from	0.794	20.610
I often look for opportunities to develop new skills and knowledge	0.838	27.593
I enjoy challenging and difficult tasks at work where I'll learn new skills	0.782	16.162
For me, the development of my workability is important enough to take risks	0.667	8.743
I prefer to work in situations that require a high level of ability and talent	0.630	7.251
Performance Orientation (Spearman Brown=0.726; CR=0.874; AVE=0.777)		
I am concerned with showing that I can perform better than my co-workers.	0.934	5.779
I try to figure out what it takes to prove my ability to others at work	0.826	3.623
Role Ambiguity (α=0.816; CR=0.889; AVE=0.727)		
I am uncertain how my work is linked	0.901	23.843
I have to work under vague directives and orders	0.808	11.416
I do not know if my work will be acceptable to my boss	0.847	15.289
Transformational Leadership (α=0.889; CR=0.909; AVE=0.526)		
My supervisor expresses his/her confidence that we will achieve our goals	0.750	24.471
My supervisor has a strong purpose	0.805	19.998
My supervisor articulates a compelling vision of the future	0.796	28.131

My supervisor talks optimistically about the future	0.714	15.186
My supervisor seeks differing perspectives when solving problems	0.722	13.661
My supervisor re-examines critical assumptions, whether they are appropriate	0.693	14.506
My supervisor got me to look at the task from many different angles	0.727	19.439
My supervisor suggests new ways of doing work	0.641	10.795
My supervisor helps group members to develop their strengths	0.663	10.518
Achievement Orientation (α=0.756; CR=0.858; AVE=0.669)		
My supervisor shows that he/she has confidence in my ability to meet most objectives	0.780	14.527
My supervisor lets me know he/she expects me to perform at my highest level.	0.880	27.338
My supervisor consistently sets challenging goals for me to attain	0.790	12.305
Output Control (α=0.794; CR=0.855; AVE=0.544)		
Performance evaluations of employees place primary emphasis on results	0.690	5.222
My pay increases and other benefits depend on the degree to which I achieve specific goals	0.600	3.978
My direct supervisor monitors the extent to which I achieve my performance goals	0.795	6.924
I receive feedback from my direct supervisor on the extent to which I achieve my performance goals	0.778	6.813
My job has specific performance goals	0.804	5.962
Process Control (α=0.745; CR=0.846; AVE=0.649)		
My immediate supervisor evaluates procedures I use to accomplish the task of working	0.808	6.851
My immediate supervisor modifies the procedures if desired results are not obtained	0.727	4.623
I receive feedback on how I accomplish my goals.	0.874	7.630
Job Complexity (Spearman Brown=0.607; CR=0.836; AVE=0.718)		
I use all my knowledge and skills in my work.	0.829	7.124
I learn new things in my work.	0.865	6.872
Work Incentives (α=0.714, CR=0.817; AVE=0.530)		
My organization provides rewards for skilled employees commensurate with their performance.	0.840	5.840
My organization provides bonuses for workers according to their post and consistent with their level of performance	0.654	4.102
My organization provides appropriate offices and well-furnished ones for employees.	0.681	4.057
Employees are promoted when they earn academic qualifications or training	0.724	4.929

Source: Field Data (2019

Output Control

Output control was measured using seven items. An examination of the initial loadings showed that items “oc1” (My salary increases and other benefits depend on how my performance meets my goals), and “oc2” (I will always have to explain why my performance goals are not met) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was

re-run. The final retained items achieved a Cronbach's alpha of 0.794, composite reliability of 0.855, and average variance extracted (AVE) estimate of 0.544. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.804) was the fact that their 'jobs have specific performance goals'; and the one with the least factor loading (0.600) was the fact that their 'pay increases and other benefits depend on the degree to which they achieve specific goals' obtained after testing for Reliability and Convergent Validity.

Process Control

Process control was measured using eight items. An examination of the initial loadings showed that items "pc1" (My pay increases and other tangible rewards depend on how well I follow work procedures), "pc2" (My pay increases and other tangible rewards depend on my knowledge of work procedures), "pc3" (My immediate supervisor monitors the extent to which I follow established procedures), "pc6" (Primary weight in evaluating employees' performance is placed on work behaviour), and "pc7" (Employees are accountable for their actions in work performance regardless of the results they achieve) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.745, composite reliability of 0.846, and average variance extracted (AVE) estimate of 0.649. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.874) was the fact that they 'receive feedback on how they accomplish their goals; the one with the least factor loading (0.727) was the fact that their 'immediate supervisors modify the procedures if desired results are not obtained' which was results from the tests done for Reliability and Convergent Validity.

Job complexity

Job complexity was measured using four items. An examination of the initial loadings showed that items "jc1" (My tasks are extraordinary and particularly difficult), and "jc2" (I often have to make very complicated decisions in my work) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. Similar to the case of the performance orientation construct, only two items of the measure were left after the deletion hence, the Spearman-Brown formula was applied. Thus, the final retained items achieved ***Spearman-Brown*** reliability of 0.607, composite reliability of 0.836, and average variance extracted (AVE) estimate of 0.718. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining two item loadings was statistically significant using bootstrap t-values (5000 sub-samples). Comparatively item "jc4" (I learn new things in my work) had a bigger loading of 0.865 than 0.829 for "jc3" (I use all my knowledge and skills in my work).

Work incentives

Work incentives were measured using seven items. An examination of the initial loadings showed that items "wi3" (My organization provides overtime payment to employees after working hours), "wi4" (My organization provides financial incentives to employees when they work professionally), and "wi5" (My organization ensures appropriate social security and health insurance for employees) cross-loaded significantly into other constructs. As a result, the offending items were deleted sequentially and the measurement model was re-run. The final retained items achieved a Cronbach's alpha of 0.714, composite reliability of 0.817, and average variance extracted (AVE) estimate of 0.530. These values are above the thresholds required for the reliability and convergent validity of the measure for this construct to be used in the data analysis. Furthermore, each of the remaining item loadings was statistically significant using bootstrap t-values (5000 sub-samples). The item with the highest factor loading (0.84) was the fact that their 'organizations provide rewards for skilled employees commensurate with their performance'; the one with the least factor loading (0.654) was the fact that their 'organizations provide bonuses for workers

according to their post and consistent with their level of performance' obtained from the tests done for the Reliability and Convergent Validity tests for the construct.

4.6.2 Discriminant Validity Assessments

Discriminant validity is about the uniqueness of a construct. Many authors including (Hair et al., 2016; Hensler et al., 2015) recommend three methods for testing discriminant validity including the Fornell-Larcker criterion, item cross-loadings, and heterotrait-monotrait ratio (HTMT) criterion. Other studies (e.g. Gerbing and Anderson, 1988) have also examined discriminant validity or multi-collinearity using the correlation matrix. In this study, the researcher examined discriminant validity using a correlation matrix, Fornell-Larcker criterion, item cross-loadings, and heterotrait-monotrait ratio (HTMT) criterion as follows:

Correlation matrix

A low to moderate correlation was obtained between the eighteen variables as presented in Table 4.8 showing the full correlation Matrix Table with p-values. The results suggest that generally, the constructs were distinct and unique.

Table 4. 8: Correlation Matrix

Constructs	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	9	10	11	12	13
1. Counterproductive Work Behaviour	1.000												
2. Employee Creativity	-0.186	1.000											
3. Role Identity	-0.322	0.475	1.000										
4. Self-Efficacy	-0.305	0.551	0.540	1.000									
5. Learning Orientation	-0.224	0.455	0.539	0.515	1.000								
6. Performance Orientation	0.107	0.149	0.047	-0.025	-0.069	1.000							
7. Role Ambiguity	0.155	-0.080	-0.177	-0.181	-0.318	0.376	1.000						
8. Transformational Leadership	-0.282	0.252	0.254	0.360	0.349	-0.018	-0.295	1.000					
9. Achievement Orientation	-0.272	0.266	0.372	0.302	0.370	-0.021	-0.288	0.648	1.000				
10. Output Control	-0.147	0.213	0.231	0.263	0.208	0.163	-0.104	0.517	0.482	1.000			
11. Process Control	-0.161	0.140	0.187	0.230	0.250	0.134	-0.114	0.534	0.396	0.627	1.000		
12. Job Complexity	-0.164	0.251	0.202	0.293	0.290	0.082	-0.079	0.388	0.328	0.240	0.245	1.000	
13. Work Incentives	-0.144	0.187	0.119	0.202	0.152	0.144	0.031	0.424	0.331	0.425	0.433	0.288	1.000

Correlation is **Significant at p<0.05; *Significant at p<0.10 (1-tail)

Source: Field data (2019).

Discriminant Validity- Fornell-Larcker Criterion

From Table 4.9 the square root of the average variance extracted estimates for each of the thirteen variables was greater than the inter-construct correlations between them (Fornell & Larcker, 1981; Hair et al., 2016). This shows that each construct is distinct and differs from the other measurement constructs in the model hence discriminant validity is met.

Table 4.9: Discriminant Validity (Square root of AVEs in diagonal-bold) - Fornel & Lacker Criterion

Constructs	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	9	10	11	12	13
1. Counterproductive Work Behaviour	0.711												
2. Employee Creativity	-0.186	0.728											
3. Role Identity	-0.322	0.475	0.779										
4. Self-Efficacy	-0.305	0.551	0.540	0.769									
5. Learning Orientation	-0.224	0.455	0.539	0.515	0.756								
6. Performance Orientation	0.107	0.149	0.047	-0.025	-0.069	0.882							
7. Role Ambiguity	0.155	-0.080	-0.177	-0.181	-0.318	0.376	0.853						
8. Transformational Leadership	-0.282	0.252	0.254	0.360	0.349	-0.018	-0.295	0.725					
9. Achievement Orientation	-0.272	0.266	0.372	0.302	0.370	-0.021	-0.288	0.648	0.818				
10. Output Control	-0.147	0.213	0.231	0.263	0.208	0.163	-0.104	0.517	0.482	0.738			
11. Process Control	-0.161	0.140	0.187	0.230	0.250	0.134	-0.114	0.534	0.396	0.627	0.805		
12. Job Complexity	-0.164	0.251	0.202	0.293	0.290	0.082	-0.079	0.388	0.328	0.240	0.245	0.847	
13. Work Incentives	-0.144	0.187	0.119	0.202	0.152	0.144	0.031	0.424	0.331	0.425	0.433	0.288	0.728

Note: Values on the diagonal in **bold** are the square roots of the average variance extracted (AVE) for each factor. Source: Field data (2019)

Discriminant Validity- Item Cross Loading Criterion

From Table 4.10 there were no significant cross-loadings left in the model following purification through a process of confirmatory factor analysis. Therefore, each construct is unique and differs from the others in the model, hence discriminant validity is established. Table 4. 9: Item Cross Loadings

Table 4.10: Item Cross Loadings

	1. Counterproductive Work Behaviour	2. Employee Creativity	3. Role Identity	4. Self-Efficacy	5. Learning Orientation	6. Performance Orientation	7. Role Ambiguity	8. Transformational Leadership	9. Achievement Orientation	10. Output Control	11. Process Control	12. Job Complexity	13. Work Incentives	14. Age	15. Experience	16. Gender	17. Educational level	18. Position
cwb2	0.652	-0.113	-0.194	-0.170	-0.135	0.066	0.032	-0.139	-0.123	-0.015	-0.048	-0.107	-0.012	-0.012	-0.051	-0.063	-0.157	-0.106
cwb3	0.611	-0.127	-0.187	-0.250	-0.162	0.158	0.141	-0.169	-0.181	-0.014	-0.039	-0.038	-0.004	0.057	0.056	-0.059	-0.127	0.004
cwb4	0.709	-0.076	-0.204	-0.220	-0.139	0.100	0.119	-0.172	-0.212	-0.105	-0.085	-0.075	-0.048	-0.042	-0.026	0.021	-0.140	-0.053
cwb5	0.702	-0.155	-0.253	-0.229	-0.121	0.047	0.121	-0.163	-0.204	-0.118	-0.029	-0.136	-0.039	-0.088	-0.035	-0.002	-0.100	-0.042
cwb6	0.733	-0.154	-0.232	-0.250	-0.209	0.136	0.166	-0.219	-0.188	-0.130	-0.123	-0.120	-0.166	-0.041	0.006	-0.097	-0.104	0.038
cwb7	0.800	-0.137	-0.203	-0.245	-0.185	0.086	0.162	-0.270	-0.203	-0.114	-0.177	-0.151	-0.160	-0.092	-0.034	-0.120	-0.135	0.000
cwb8	0.707	-0.073	-0.178	-0.187	-0.213	0.117	0.133	-0.219	-0.192	-0.075	-0.132	-0.066	-0.055	-0.031	0.049	-0.107	-0.091	-0.054
cwb9	0.748	-0.167	-0.259	-0.221	-0.200	0.073	0.126	-0.258	-0.183	-0.123	-0.206	-0.175	-0.174	-0.117	-0.060	-0.101	-0.082	0.018
cwb10	0.671	-0.129	-0.215	-0.201	-0.122	0.014	0.060	-0.179	-0.191	-0.134	-0.108	-0.114	-0.146	-0.108	-0.083	-0.059	-0.123	-0.036
cwb12	0.761	-0.172	-0.334	-0.205	-0.112	-0.001	0.048	-0.194	-0.243	-0.176	-0.147	-0.148	-0.158	-0.100	-0.147	-0.090	-0.155	-0.086
ec1	-0.133	0.657	0.346	0.344	0.385	0.089	-0.160	0.197	0.248	0.160	0.086	0.212	0.138	0.067	0.035	-0.018	-0.001	-0.213
ec2	-0.108	0.718	0.275	0.346	0.224	0.134	-0.030	0.135	0.190	0.167	0.057	0.162	0.173	0.158	0.161	-0.069	0.020	-0.062
ec8	-0.073	0.691	0.333	0.373	0.300	0.095	-0.045	0.139	0.178	0.130	0.049	0.073	0.146	0.129	0.110	-0.074	-0.018	-0.147
ec9	-0.119	0.726	0.356	0.362	0.296	0.090	0.024	0.148	0.164	0.152	0.078	0.127	0.152	0.144	0.129	-0.076	-0.018	-0.100
ec10	-0.106	0.678	0.317	0.439	0.349	0.041	-0.077	0.151	0.167	0.091	0.066	0.174	0.104	0.195	0.167	-0.056	0.046	-0.161
ec11	-0.106	0.717	0.360	0.442	0.377	0.066	-0.021	0.165	0.206	0.190	0.121	0.226	0.116	0.123	0.136	-0.056	0.017	-0.099
ec12	-0.183	0.819	0.381	0.469	0.369	0.126	-0.091	0.262	0.231	0.228	0.188	0.189	0.190	0.042	0.112	0.011	0.015	-0.075
ec13	-0.184	0.804	0.387	0.430	0.343	0.180	-0.043	0.208	0.166	0.112	0.108	0.241	0.088	0.106	0.081	0.013	0.039	-0.053
ri2	-0.303	0.321	0.804	0.474	0.529	-0.120	-0.305	0.277	0.403	0.204	0.176	0.192	0.067	-0.075	-0.107	-0.032	-0.005	-0.144
ri3	-0.175	0.409	0.723	0.409	0.330	0.175	0.000	0.116	0.187	0.153	0.088	0.093	0.115	0.064	0.045	-0.025	-0.020	-0.165
ri4	-0.246	0.412	0.806	0.372	0.359	0.133	-0.032	0.162	0.230	0.174	0.153	0.164	0.112	-0.023	-0.018	0.088	-0.059	-0.107
sef1	-0.167	0.409	0.367	0.688	0.352	-0.042	-0.200	0.292	0.208	0.120	0.064	0.159	0.144	0.068	0.022	-0.034	0.056	-0.209
sef3	-0.288	0.467	0.460	0.847	0.455	-0.026	-0.196	0.310	0.275	0.228	0.255	0.260	0.145	0.021	0.067	0.041	0.150	-0.114
sef4	-0.237	0.415	0.427	0.826	0.413	0.021	-0.146	0.279	0.248	0.227	0.194	0.221	0.176	0.063	0.080	0.012	0.048	-0.089
sef6	-0.226	0.406	0.401	0.703	0.354	-0.035	-0.021	0.233	0.190	0.215	0.152	0.246	0.164	0.054	0.047	0.017	-0.003	-0.024
lo1	-0.204	0.364	0.425	0.436	0.802	-0.063	-0.323	0.313	0.359	0.166	0.208	0.250	0.091	-0.060	-0.110	-0.082	0.000	-0.095
lo2	-0.154	0.416	0.416	0.421	0.794	-0.096	-0.202	0.241	0.264	0.136	0.173	0.234	0.122	0.052	-0.030	-0.050	-0.017	-0.189
lo3	-0.237	0.337	0.446	0.398	0.838	-0.056	-0.280	0.319	0.281	0.151	0.208	0.226	0.171	-0.021	-0.078	0.029	0.008	-0.068
lo4	-0.143	0.324	0.452	0.380	0.782	-0.037	-0.217	0.257	0.325	0.126	0.164	0.237	0.127	-0.061	-0.097	-0.024	-0.066	-0.131
lo5	-0.054	0.417	0.422	0.444	0.667	-0.027	-0.214	0.288	0.295	0.230	0.206	0.213	0.135	-0.111	-0.121	-0.026	-0.023	-0.060
lo6	-0.110	0.292	0.307	0.316	0.630	-0.009	-0.158	0.147	0.154	0.228	0.203	0.159	0.025	-0.003	-0.055	0.019	-0.080	-0.061
po2	0.112	0.068	-0.034	-0.110	-0.159	0.934	0.386	-0.072	-0.097	0.093	0.107	0.040	0.154	0.139	0.213	-0.008	0.009	-0.001
po3	0.071	0.235	0.161	0.116	0.091	0.826	0.256	0.071	0.103	0.229	0.139	0.125	0.089	0.072	0.144	-0.064	0.111	0.005
ra5	0.164	-0.067	-0.148	-0.165	-0.258	0.315	0.901	-0.259	-0.279	-0.118	-0.118	-0.073	-0.032	0.051	0.184	0.006	0.014	0.118
ra6	0.102	-0.057	-0.153	-0.137	-0.224	0.333	0.808	-0.241	-0.237	-0.089	-0.046	-0.025	0.073	0.027	0.128	0.008	0.114	0.174
ra7	0.118	-0.082	-0.156	-0.159	-0.338	0.328	0.847	-0.258	-0.214	-0.049	-0.115	-0.097	0.067	0.079	0.182	0.016	0.033	0.130
tl1	-0.261	0.208	0.215	0.275	0.318	-0.086	-0.403	0.750	0.523	0.413	0.491	0.305	0.281	-0.062	-0.018	-0.056	0.088	-0.110
tl2	-0.260	0.165	0.238	0.288	0.275	-0.075	-0.246	0.805	0.565	0.463	0.378	0.287	0.245	-0.015	0.019	-0.021	0.098	-0.009

tl3	-0.229	0.194	0.143	0.283	0.223	-0.033	-0.244	0.796	0.436	0.341	0.367	0.309	0.293	0.080	0.074	-0.034	0.098	-0.063
tl4	-0.210	0.235	0.248	0.291	0.232	-0.037	-0.176	0.714	0.455	0.389	0.311	0.255	0.295	-0.003	0.039	0.016	-0.012	-0.024
tl5	-0.196	0.151	0.204	0.264	0.252	0.099	-0.113	0.722	0.429	0.356	0.364	0.306	0.389	0.017	0.077	0.004	0.028	-0.037
tl6	-0.188	0.209	0.165	0.246	0.306	0.043	-0.140	0.693	0.433	0.271	0.364	0.304	0.331	0.066	0.051	-0.023	0.009	-0.073
tl7	-0.180	0.139	0.126	0.178	0.242	0.005	-0.189	0.727	0.432	0.383	0.504	0.281	0.410	-0.029	0.056	-0.013	0.015	-0.038
tl9	-0.086	0.122	0.089	0.233	0.213	-0.009	-0.173	0.641	0.512	0.388	0.384	0.212	0.305	-0.050	0.047	-0.030	0.027	-0.070
tl10	-0.093	0.225	0.155	0.323	0.170	0.074	-0.121	0.663	0.514	0.420	0.339	0.246	0.299	-0.056	0.099	0.000	0.135	-0.024
ao1	-0.173	0.253	0.319	0.257	0.369	-0.026	-0.331	0.551	0.780	0.377	0.342	0.305	0.275	-0.073	-0.046	-0.101	0.015	-0.106
ao2	-0.272	0.204	0.302	0.257	0.319	-0.062	-0.248	0.505	0.880	0.401	0.318	0.239	0.242	-0.020	0.041	-0.032	0.106	-0.032
ao3	-0.204	0.210	0.301	0.233	0.234	0.048	-0.145	0.559	0.790	0.412	0.326	0.285	0.313	0.076	0.069	-0.028	0.018	-0.047
oc3	-0.108	0.202	0.228	0.254	0.221	0.190	-0.079	0.312	0.328	0.690	0.420	0.234	0.289	0.033	0.098	-0.056	0.009	-0.052
oc4	-0.059	0.147	0.136	0.191	0.081	0.211	0.043	0.285	0.213	0.600	0.367	0.163	0.430	0.052	0.077	-0.088	0.077	-0.102
oc5	-0.103	0.073	0.149	0.192	0.076	0.039	-0.036	0.378	0.353	0.795	0.493	0.157	0.317	-0.016	0.125	-0.084	0.063	0.015
oc6	-0.094	0.192	0.156	0.143	0.201	0.158	-0.118	0.495	0.424	0.778	0.598	0.272	0.331	0.013	0.139	-0.117	0.047	-0.039
oc7	-0.149	0.173	0.176	0.197	0.166	0.074	-0.128	0.424	0.412	0.804	0.438	0.106	0.289	-0.009	0.053	-0.046	0.041	-0.004
pc4	-0.100	0.091	0.149	0.225	0.239	0.065	-0.153	0.488	0.301	0.477	0.808	0.216	0.347	-0.024	0.018	-0.069	-0.048	-0.078
pc5	-0.091	0.070	0.152	0.144	0.157	0.044	-0.075	0.424	0.349	0.542	0.727	0.087	0.285	-0.035	0.021	-0.060	-0.072	-0.071
pc8	-0.172	0.152	0.156	0.191	0.210	0.170	-0.069	0.415	0.325	0.519	0.874	0.251	0.395	-0.040	0.119	-0.039	0.027	-0.037
jc3	-0.131	0.174	0.183	0.242	0.227	0.095	0.020	0.210	0.192	0.144	0.160	0.829	0.190	0.040	0.053	0.032	0.063	-0.042
jc4	-0.146	0.247	0.161	0.255	0.263	0.046	-0.145	0.436	0.356	0.257	0.250	0.865	0.293	0.040	0.133	-0.040	0.036	-0.056
wi1	-0.149	0.186	0.074	0.165	0.124	0.124	0.014	0.383	0.271	0.325	0.377	0.239	0.840	0.118	0.168	-0.077	0.108	-0.065
wi2	-0.064	0.110	0.111	0.108	0.077	0.050	-0.072	0.322	0.344	0.346	0.284	0.149	0.654	0.010	0.154	0.042	0.043	-0.118
wi6	-0.087	0.096	0.165	0.206	0.167	0.084	0.005	0.290	0.259	0.267	0.272	0.290	0.681	0.022	0.164	-0.045	0.085	-0.022
wi7	-0.092	0.129	0.026	0.108	0.070	0.143	0.121	0.229	0.129	0.331	0.313	0.152	0.724	0.009	0.141	0.082	0.033	0.019

Note: Shaded cells indicate loadings of items on their constructs.

Source: Field data (2019

Discriminant Validity- Heterotrait-Monotrait Ratio

Recent research on variance-based structural equation modeling has suggested that the Fornel and Larcker criterion alone is not conclusive on discriminant validity (Henseler et al 2015; Osei-Frimpong, 2017). The authors recommend performing the heterotrait-monotrait ratio (HTMT) of correlations in addition to the Fornell and Larcker criterion. The authors argued that cross-loadings of indicators explain zero percent of discriminant validity while Fornell-Larcker and HTMT criterions explained 20.82 percent and 97 to 99 percent of discriminant validity respectively. As a result, the study utilizes the HTMT with a specificity ratio of 0.85, which is considered the most conservative HTMT method. The HTMT results presented in Table 4.11 show that none of the correlations exceeded 0.85 thus confirming discriminant validity for the thirteen (13) variable model. This means the data has through this test has been able to achieve a higher specificity and sensitivity rates with a threshold of (85%) as compared to the cross-loadings criterion and Fornell-Lacker. The literature proposes HTMT values close to 1 indicates a lack of discriminant validity therefore it can be concluded from the test values that there is a lack of discriminant validity.

Table 4.11: Discriminant Validity-HTMT 0.85 Criterion

Constructs	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	9	10	11	12	13
1. Counterproductive Work Behaviour													
2. Employee Creativity	0.194												
3. Role Identity	0.389	0.621											
4. Self-Efficacy	0.362	0.671	0.732										
5. Learning Orientation	0.228	0.541	0.681	0.642									
6. Performance Orientation	0.137	0.205	0.272	0.169	0.186								
7. Role Ambiguity	0.176	0.101	0.198	0.229	0.366	0.476							
8. Transformational Leadership	0.290	0.274	0.286	0.442	0.387	0.124	0.325						
9. Achievement Orientation	0.320	0.333	0.489	0.395	0.461	0.154	0.371	0.811					
10. Output Control	0.179	0.257	0.303	0.330	0.271	0.260	0.134	0.614	0.608				
11. Process Control	0.183	0.152	0.245	0.286	0.319	0.164	0.152	0.670	0.539	0.824			
12. Job Complexity	0.219	0.327	0.298	0.420	0.400	0.142	0.150	0.510	0.490	0.358	0.333		
13. Work Incentives	0.174	0.226	0.218	0.273	0.196	0.181	0.129	0.538	0.473	0.603	0.572	0.434	

Source: Filed data (2019)

4.7 Structural Equation Modelling

After examination of the measurement model (confirmatory factor analysis), the next stage is to perform structural equation modeling (path analysis) (Hair et al., 2016; Lings & Greenly, 2010). PLS-SEM does not generate overall goodness of fit indices. The model efficiency techniques employed in this study include:

1. Model's predictive accuracy (R^2) (Hair et al., 2016; Chin, 1998),
2. Model's predictive relevancy (Q^2) (Hair et al., 2016; Ali et al., 2016; Chin, 2010) and
3. Effect sizes (f^2) (Hair et al., 2016; Ali et al., 2016, 1993; Chin, 2010).
   Q^2 value greater than 0 shows predictive relevance (Hair et al., 2016; Ali et al., 2016; Chin, 2010). Cohen (1988) provided effect size cut-off values of 0.02, 0.15, and 0.35 for small, medium, and large effect sizes respectively for the selected exogenous variable.

Finally, the significance of each structural path was tested using bootstrap t-values (5000 sub-samples) (Efron and Gong, 1983; Tortosa et al., 2009; Hair et al. 2016), a procedure available in PLS-SEM. This procedure was to ascertain whether relationships between the various constructs under investigation were significant. This procedure helps the study find answers to the study hypotheses. In this section, the study examines both the structural paths and moderated paths.

4.7.1 Structural Model

This study examines the effects of the antecedents of creativity (role identity, self-efficacy, learning orientation, performance orientation, role ambiguity, transformational leadership, achievement orientation, output control, and process control) on employee creativity and subsequently counterproductive work behaviour, whilst controlling for job complexity, work incentives, age, experience, gender, educational level, and position. Figure 4.2 presents the results of the structural model for this study showing path coefficients and factor loadings.

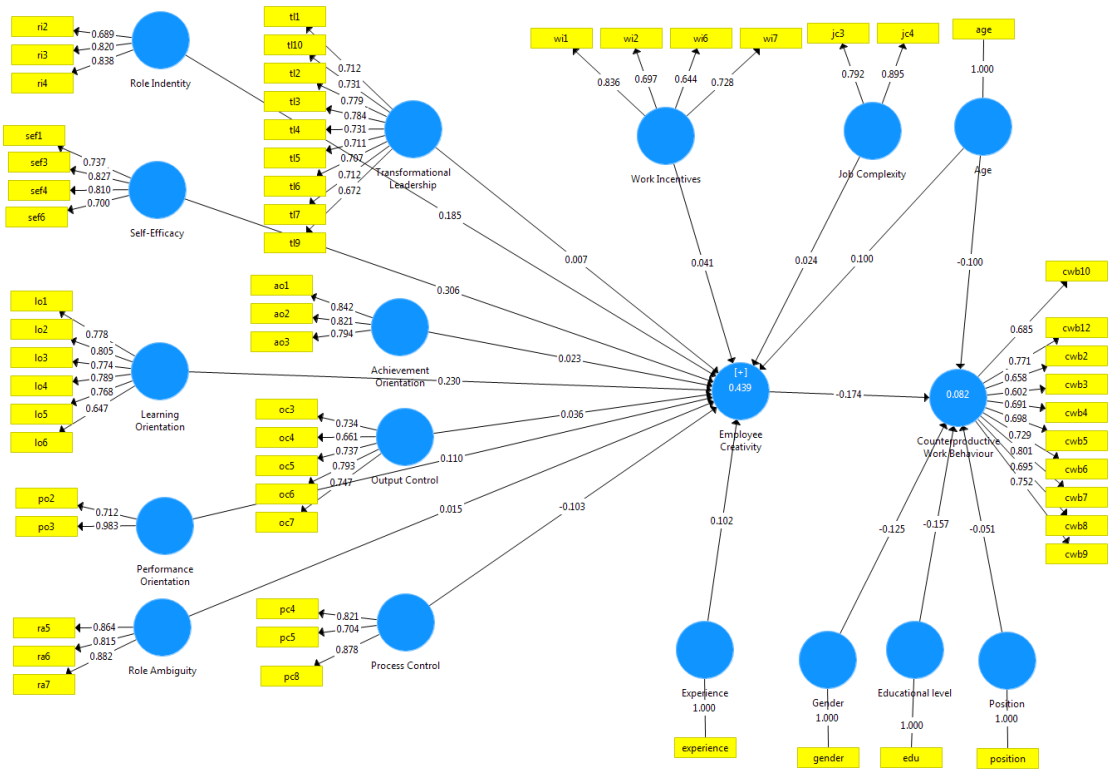


Figure 4. 2 - Structural model showing path coefficients (inner model) and factor loadings (outer model)

Source: Field Data (2019)

Also figure 4.3 shows that the structural paths showing the bootstrap t-values.

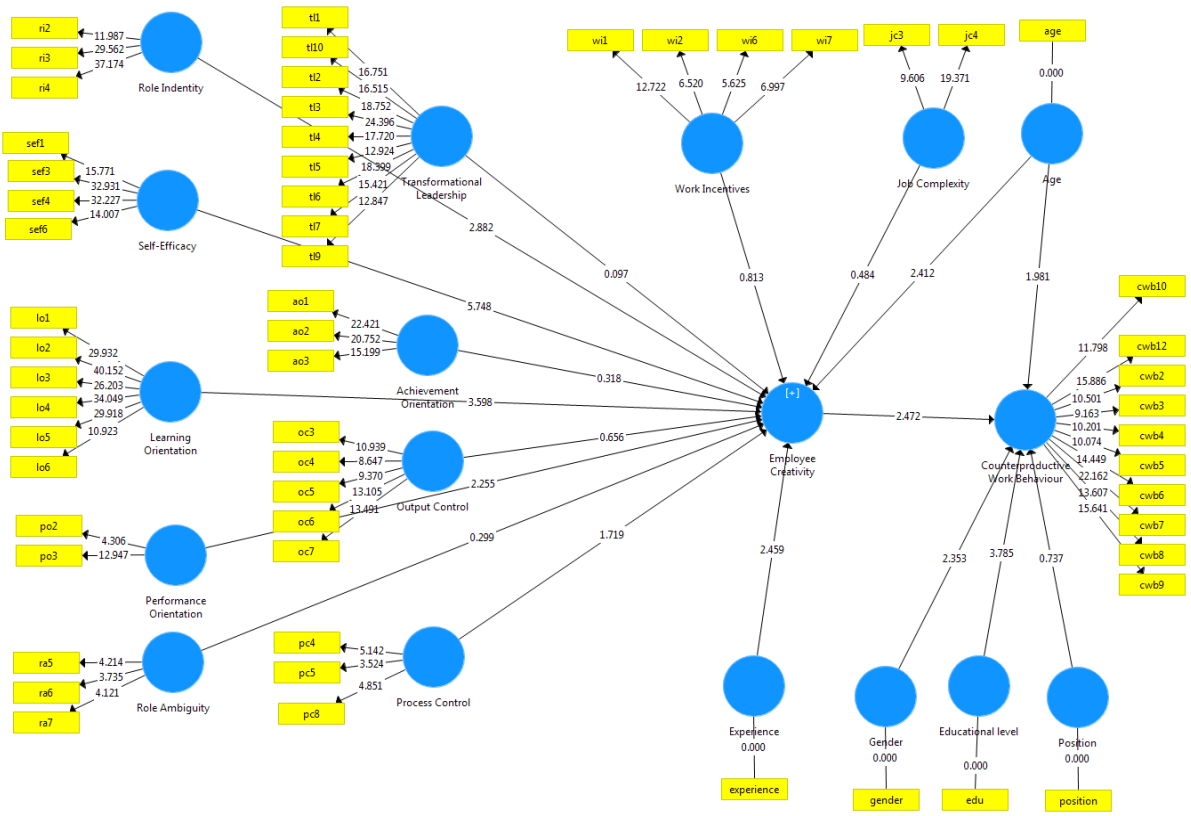
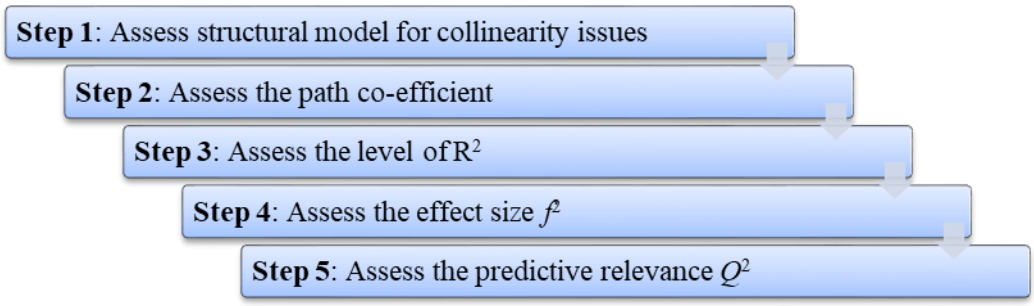


Figure 4. 3 - Structural model showing bootstrap t-values

Source: Field Data (2019)

Before concluding on the structural model, the following five steps are recommended (Hair et al., 2014):



Assessment of Structural Model for Collinearity issues (Test for Multi-collinearity)

Table 4.12 shows the collinearity statistics, which have been calculated using Variance Inflation Factors (VIFs) for the inner structural model. All the VIFs were lower than 5, which

is recommended to prove the absence of collinearity problems (Hair et al. 2014; Hair et. al. 2016). Therefore, the structural model does not have multi-collinearity problems.

Table 4. 12: Multicollinearity Test (showing Valuation Inflation Factor values)

High-level constructs	**Employee Creativity**	**Counterproductive Work Behaviour**
1. Counterproductive Work Behaviour	_	_
2. Employee Creativity		1.043
3. Role Identity	1.661	
4. Self-Efficacy	1.747	
5. Learning Orientation	1.771	
6. Performance Orientation	1.262	
7. Role Ambiguity	1.409	
8. Transformational Leadership	2.431	
9. Achievement Orientation	2.105	
10. Output Control	2.031	
11. Process Control	1.895	
12. Job Complexity	1.287	
13. Work Incentives	1.475	
14. Age	1.149	1.131
15. Experience	1.264	
16. Gender		1.048
17. Educational level		1.053
18. Position		1.151

Note: VIF<=5 is acceptable (Hair et al. 2014)

Source: Field Data (2019)

Assessment of Path Coefficients (Hypotheses Testing)

Regression weights were used to assess the path coefficients as well as bootstrap t-values to determine the significance of hypothesized structural paths (Hair et al., 2016, Tortosa, Moliner, and Sanchez (2009). This procedure helps to find answers to the first ten hypotheses

of the study. A summary of the hypotheses test conducted and conclusions made are shown in Table 4.14. The bootstrap t-values show that six of the ten paths were statistically significant.

Hypotheses Test

The hypotheses test results are explained as follows:

H_1: *Role identity is positively related to employee creativity*.

The data analysis results for this relationship revealed a positive and significant association exists between role identity and employee creativity (β=0.185, t=2.882, $p<0.01$). This implies that the result confirms the argument in the literature that employees will use their role identities to give meaning to themselves and increase their creativity (Farmer, Tierney & Kung-McIntyre, 2003). This is because they are inclined to display behaviours consistent with their self-views and those others hold of them to confirm their role identity (Erkutlu & Chafra, 2015). Thus, being considered being creative will cause them to increase their creativity to affirm this perception held by others. Consequently, this means a strong role identity is positively related to employee creativity. Therefore, hypothesis **H_1** is supported in the present context.

H_2: *Self-efficacy is positively related to employee creativity*

The results show that a positive and significant association exists between self-efficacy and employee creativity (β=0.306, t=5.748, $p<0.01$). Prior studies suggest that employees can increase their involvement in creative behaviour when they feel a high level of confidence in their self-efficacy (Gong, Huang & Farh, 2009). Similarly, Tierney and Farmer (2011) proposed that a sense of self-efficacy could remove obstacles to creative engagements. Thus, it has been argued that employees with a high self-efficacy can surmount the difficulties they face which at the same time enable them to seek creative ways to carry out their job functions (Bandura & Locke, 2003). Consistent with this view, the results of the data analysis for this hypothesis highlight the proposition that self-efficacy will enhance creativity. This, therefore, means a high self-efficacy is positively related to employee creativity. Therefore, hypothesis **H_2** is supported in the present context.

H_3: *Learning orientation is positively related to employee creativity*

In the case of this hypothesis, a positive and significant association was found to exist between learning orientation and employee creativity (β=0.230, t=3.598, p<0.01). Drawing on previous research, the study had argued that learning orientation would increase creativity because employees with a high learning orientation consistent with their goal orientation will focus on expertise development (Janssen & Van Yperen, 2004). This will cause them to have a fundamental interest in understanding and mastering task performance, which will increase their creativity. Consequently, they may seek out creative activities through methods that are uncertain and untried as they are more naturally motivated to be creative. This argument is confirmed in the results of the data analysis giving support for the hypothesis that a high learning orientation is positively related to employee creativity. Therefore, hypothesis **H_3** is supported in the present context.

H_4: *Performance orientation is negatively related to employee creativity*

The results of the data analysis revealed that a positive and significant association exists between performance orientation and employee creativity (β=0.110, t=2.255, p<0.05). This is contrary to the study's hypothesis that employees with a high-performance orientation are motivated by external outcomes related to performance such as rewards and acknowledgement, and are more concerned with accomplishing high-performance (Hirst et al., 2011), so they will not be concerned with increasing their creativity. Thus, the argument that performance-oriented employees pursue maximizing rewards and minimizing potential punishments are not likely to participate in creative activities was found to be inconsistent with the data results. Consequently, a high-performance orientation is not negatively related to employee creativity. Therefore, hypothesis **H_4** is not supported in the present context.

H_5: *Role ambiguity is negatively related to employee creativity.*

The relationship between role ambiguity and employee creativity was not statistically significant (β=0.015, t=0.299, p>0.05). In this regard, the study had argued that because role ambiguity leads to a lack of specificity and certainty for an employee's job roles it weakens an individual's ability to perform a task therefore, employees under such circumstances would not engage in creative activities (Tang& Chang, 2010). However, the results of the data analysis were inconsistent with this view. The results are in line with arguments by Ebbers & Wijnberg (2017) that role ambiguity may create conditions for employees to exhibit unique ways of performing their job functions. This is because role ambiguity may force employees

to define their roles in executing their job functions. Thus, role ambiguity can have varying effects on employee creativity when it becomes beneficial as affected individuals utilize the resulting opportunities for capacious role definition, which can positively affect the organization as a whole. It rather revealed that role ambiguity would increase employee creativity. Therefore, hypothesis **H_5** is not supported in the present context.

H_6: *Transformational leadership is positively related to employee creativity.*

The data analysis results on the relationship between transformational leadership and employee creativity were not statistically significant (β=0.007, t=0.097, p>0.05). Even though, the study argued that transformational leadership would inspire employees to broaden and raise their interest to increase their creativity (Li, Bai & Xi, 2012; Wang & Howell, 2010) the results proved this was not true. It rather showed that employees would not increase their creativity despite transformational leadership providing creative employees with the confidence to perform beyond expectations specified in the implicit or explicit exchange agreement, (Dvir et al., 2002). Therefore, hypothesis **H_6** is not supported in the present context

H_7: *Achievement orientation is positively related to employee creativity*

The relationship between achievement orientation and employee creativity was not statistically significant (β=0.023, t=0.318, p>0.05). This is in contrast with the study's argument that because achievement-oriented employees are enthusiastic about any competitive activity, which enables them to demonstrate their ability (Yi & Wang, 2015), they would increase their creativity. Thus, the results show that despite their inclination to work harder and demonstrate more effort to achieve their goals, they will increase their creativity. Therefore, hypothesis **H_7** is not supported in the present context.

Table 4.13: Structural path results

Hypotheses	Structural path	Path coefficient	t-value (Bootstrap)	p	Hypotheses results
H1	Role Identity → Employee Creativity	0.185***	2.882	0.004	Supported
H2	Self-Efficacy → Employee Creativity	0.306***	5.748	0.000	Supported
H3	Learning Orientation → Employee Creativity	0.230***	3.598	0.000	Supported
H4	Performance Orientation → Employee Creativity	0.110**	2.255	0.024	Not Supported
H5	Role Ambiguity → Employee Creativity	0.015	0.299	0.765	Not Supported
H6	Transformational Leadership → Employee Creativity	0.007	0.097	0.923	Not Supported
H7	Achievement Orientation → Employee Creativity	0.023	0.318	0.750	Not Supported
H8	Process Control → Employee Creativity	-0.103*	1.719	0.086	Supported
H9	Output Control → Employee Creativity	0.036	0.656	0.512	Not Supported
H10	Employee Creativity → Counterproductive Work Behaviour	-0.174**	2.472	0.013	Not Supported
	Work Incentives → Employee Creativity	0.041	0.813	0.416	
	Job Complexity → Employee Creativity	0.024	0.484	0.629	
	Age → Employee Creativity	0.100**	2.412	0.016	
	Experience → Employee Creativity	0.102**	2.459	0.014	
	Age → Counterproductive Work Behaviour	-0.100**	1.981	0.048	
	Gender → Counterproductive Work Behaviour	-0.125**	2.353	0.019	
	Educational level → Counterproductive Work Behaviour	-0.157***	3.785	0.000	
	Position → Counterproductive Work Behaviour	-0.051	0.737	0.461	

Note: ***Significant at p<0.01; **Significant at p<0.05; *Significant at p<0.10

H_8: *Process control is negatively related to employee creativity*

A negative and significant association exists between process control and employee creativity (β=-0.103, t=1.719, p<0.10). This result confirmed the study's argument that although process control leads to efficient systems of operation, it will hinder out-of-the-box thinking which will stifle creativity (Erukutlu & Chafra, 2015). Thus, because process control outlines boundaries within which job functions are performed, it places limits on an employee's freedom to increase creative activities consistent with the proposed hypothesis. This means a high process control is negatively related to employee creativity. Therefore, hypothesis **H_8** is supported in the present context.

H_9: *Output control is positively related to employee creativity*

The relationship between output control and employee creativity was not statistically significant (β=0.036, t=0.656, p>0.05). In this case, the results show a contrary view to the study's hypothesis that output control will increase employee creativity. The study argued that output control would enable employees to increase their creativity because they will not bear the burden of compliance (Erramilli & Rao, 1993) but this was not true from the data analysis. Similarly, even though output control may boost employees' ability to meet the desired output targets but this would not increase their creativity. Therefore, hypothesis **H_9** is not supported in the present context.

H_{10}: *Employee creativity is positively related to the counterproductive work behaviour of employees in an organization*

A negative and significant association exists between employee creativity and counterproductive work behaviour (β=-0.174, t=2.472, p<0.10). This result of the data analysis was also not consistent with the proposed hypothesis. The study argued that employees in exercising their creativity might engage in unethical work behaviour and break regulations, which may result in counterproductive work behaviour (Gino & Ariely, 2012). They might also engage in CWB as they think outside the box to produce new ideas and processes, and as they use their creativity to behave dishonestly. This was contrary according to the results which means employee creativity is negatively related to the counterproductive work behaviour of employees in an organization. Therefore, hypothesis **H_{10}** is not supported in the present context.

Assessment of the level of R-Square

The coefficient of determination (R-square) is used to assess the amount of variance in the endogenous variable as explained by the exogenous variables used in the Model. From Table 4.13, an R-square of 0.439 was obtained for employee creativity, implying that 44% of the variance in employee creativity is explained by personal and supervisory factors and the control variables age, experience, job complexities, and work incentives. Furthermore, a variance of 8.2% was explained in counterproductive work behaviour as accounted for by employee creativity, and the control variables age, gender, education, and position. In effect, this means that the personal and supervisory factors together with the control variable contribute to 44% of what constitutes employee creativity. Similarly, employee creativity and the control variables related to CWB in the model make up 8.2% of CWB. According to Hair et al. (2016), in PLS-SEM, this test is done to assess how well the theory fits with the data gathered.

Assessment of the Effect Sizes f-square

This study examined the effect sizes (f^2) of each of the exogenous constructs in the model to determine the magnitude of their effect on the R^2 values. This test was done to measure the strength of the relationship between the endogenous and exogenous variables in the direct relationships for both the antecedents and employee creativity on one hand and employee creativity and CWB on the other hand. The results are also presented in Table 4.13. Just like traditional multiple regression, effect sizes (f^2) values of 0.02, 0.15, and 0.35 show small, medium, and large effects respectively (Cohen, 1988; Hair et al, 2016). For employee creativity, small effect sizes were obtained for personal factors such as role identity, self-efficacy, learning orientation, and performance orientation whereas no effect sizes were obtained for the supervisory factors such as role ambiguity, transformational leadership, achievement orientation, output control, and process control. This gives evidence of the strength of the relationship between personal factors and employee creativity as against supervisory factors. For counterproductive work behaviour, the small effect size was obtained for employee creativity, gender, and educational level but none for the position.

Assessment of the Predictive Relevance Q-square

The Q^2 (cross-validated redundancy) value for the model is also presented in Table 4.13 (Hair et al., 2016; Chin, 2010). Q^2 values of 0.213 and 0.036 were obtained for employee

creativity and counterproductive work behaviour respectively, both of which are greater than 0 showing predictive relevance (Hair et al., 2016; Chin, 2010).

Table 4.14: Predictive Accuracy (R2), Predictive Relevance (Q2), and Effect Sizes (f2)

Constructs	R^2	Q^2	Employee Creativity	Counterproductive Work Behaviour
1. Counterproductive Work Behaviour	0.082	0.036		
2. Employee Creativity	0.439	0.213		0.030(Small)
3. Role Identity			0.040(Small)	
4. Self-Efficacy			0.100(Small)	
5. Learning Orientation			0.050(Small)	
6. Performance Orientation			0.020(Small)	
7. Role Ambiguity			0.000(None)	
8. Transformational Leadership			0.000(None)	
9. Achievement Orientation			0.000(None)	
10. Output Control			0.000(None)	
11. Process Control			0.010(None)	
12. Job Complexity			0.000(None)	
13. Work Incentives			0.000(None)	
14. Age			0.020(Small)	0.010(None)
15. Experience			0.020(Small)	
16. Gender				0.020(Small)
17. Educational level				0.030(Small)
18. Position				0.000(None)

Source: Field Data (2019)

The Moderated Models

Nine moderated models were built to find answers to the remaining nine hypotheses (H_{11}-H_{19}). In expanding on the form of these interactions for the hypotheses, which were supported (role identity, self-efficacy, transformational leadership, output control, and achievement orientation), the study followed the procedure recommended by Aiken and West (1991) and plotted low versus high scores on the moderating constructs (one standard

deviation below and above the means using standardized scores). In this instance, the Blue line represents the mean showing the direction of the relationship, the green line represents one standard deviation above the mean, while the red line represents one standard deviation below the mean. From the Figures (4.5, 4.7, 4.12, 4.15 & 4.17) presented, the four slopes are not parallel showing evidence of moderation and interaction at some point where they are likely to meet and cross in support of the hypothesis.

The moderating hypotheses formulated in this study are as follows:

H_{11}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when role identity is low rather than high.*

H_{12}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when self-efficacy is low rather than high*

H_{13}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when learning orientation is low rather than high*

H_{14}: *The positive effect of employee creativity on counterproductive work behaviour is stronger when performance orientation is high rather than low*

H_{15}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when role ambiguity is high rather than low*

H_{16}: *The positive effect of employee creativity on counterproductive work behaviour is stronger when transformational leadership is high rather than low*

H_{17}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when process control is high rather than low*

H_{18}: *The positive effect of employee creativity on counterproductive work behaviour is weaker when output control is low rather than high*

H_{19}: *The positive effect of employee creativity on counterproductive work behaviour is stronger when achievement orientation is high rather than low*

The moderating effect of role identity on employee creativity and counterproductive work behaviour (H_{11})

The moderation effect of role identity on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.14 and Figure 4.4. The R-square of the main structural model is 0.082 (Model 2), which increased to 0.172 (Model 3) following the introduction of the moderator-role identity. The interaction effect of role identity with employee creativity further increased the R-square to 0.225 (Model 4) resulting in a change in R-square of about 5.3%. Furthermore, the interaction of role identity with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.173, t=2.391, p=0.017<0.05). This implies that role identity strengthens the relationship between employee creativity and counterproductive work behaviour. Therefore, the effect of employee creativity on counterproductive work behaviour is weaker when role identity is low rather than high thus lending support to hypothesis 11 (**H_{11})**. In effect, this means that the argument by the study that role identity while increasing employee creativity will also hinder CWB is confirmed.

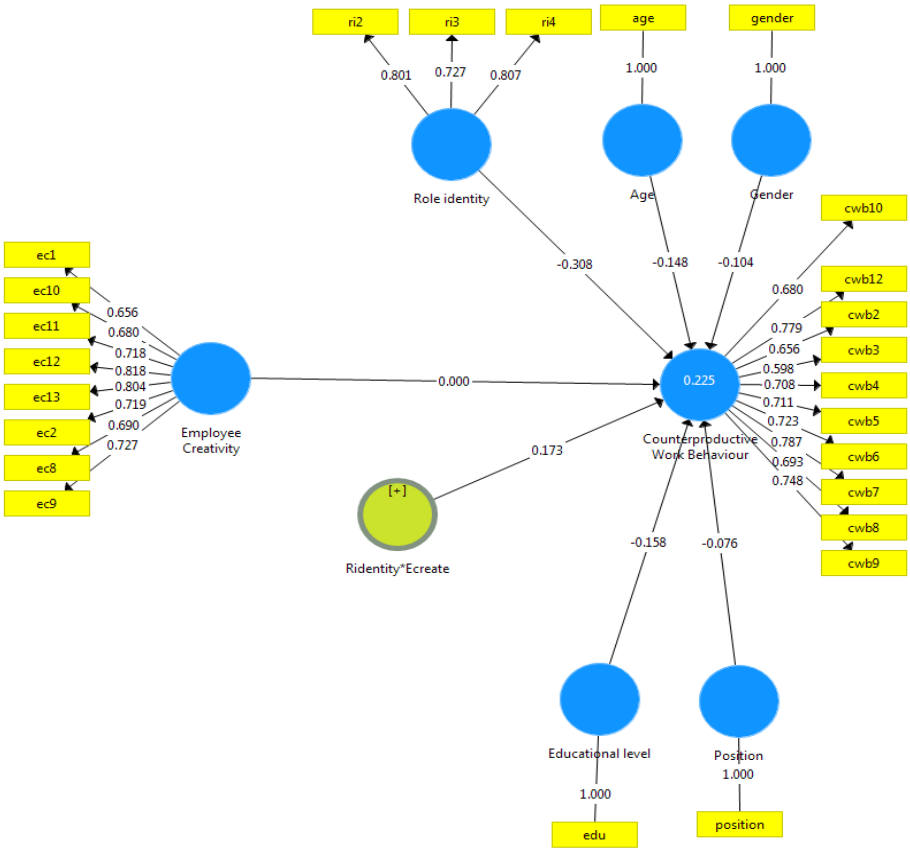


Figure 4. 4 - Moderation test for role identity on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.15: Moderating Effect of Role Identity

Rival Models		Model 1	**Model 2**	**Model 3**	**Model 4**
Age	→ CWB	-0.125**	-0.100**	-0.147***	-0.148***
Gender	→ CWB	-0.125**	-0.125**	-0.111**	-0.104**
Educational level	→ CWB	-0.164***	-0.157***	-0.161***	-0.158***
Position	→ CWB	-0.032	-0.051	-0.102	-0.076
Employee creativity	→ CWB		-0.174**	-0.018	0.000
Role identity	→ CWB			-0.343***	-0.308***
RI*EC	→ CWB				0.173**
R^2		0.054	0.082	0.172	0.225
ΔR^2			0.028	0.090	0.053

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

The moderation slope presented in Figure 4.5 further highlights the fact that role identity moderates the relationship between employee creativity and counterproductive work behaviour. As the data analysis has revealed, the interaction of role identity with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.173, t=2.391, p=0.017<0.05). Thus, implying that role identity strengthens the relationship between employee creativity and counterproductive work behaviour. This shows that self-efficacy will increase employee creativity while also preventing creative employees from indulging in CWB.

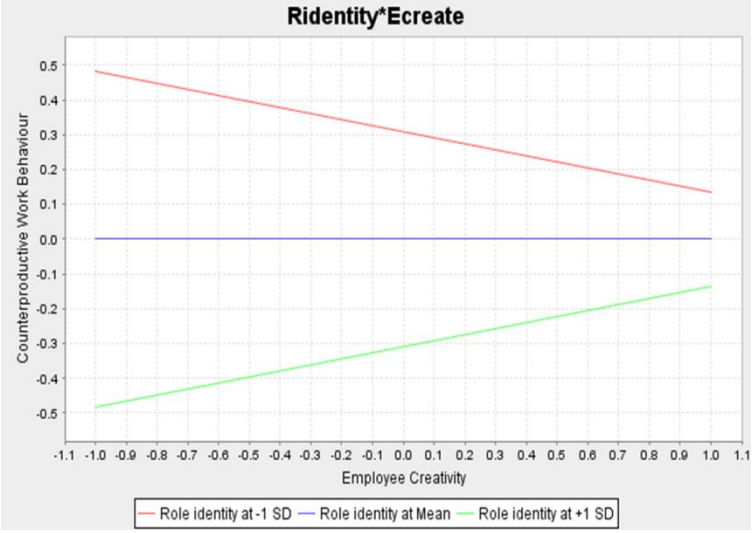


Figure 4. 5 - Moderation slope showing the moderating effect of role identity employee creativity and counterproductive work behaviour.
Source: Field Data (2019).

The moderating effect of self-efficacy on employee creativity and counterproductive work behaviour (H_{12})

The moderation effect of self-efficacy on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.15 and Figure 4.6. The R-square of the main structural model is 0.082 (Model 2), which increased to 0.136 (Model 3) following the introduction of the moderator self-efficacy. The interaction effect of self-efficacy with employee creativity further increased the R-square to 0.153 (Model 4) resulting in a change in R-square of about 2%. Furthermore, the interaction of self-efficacy with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.106,

t=1.792, p<0.10). This implies that self-efficacy strengthens the relationship between employee creativity and counterproductive work behaviour. Therefore, the effect of employee creativity on counterproductive work behaviour is weaker when self-efficacy is low rather than high thus lending support to hypothesis 12 (**H_{12}**). This is an indication that although self-efficacy will increase employee creativity, it will hinder CWB consistent with the study hypothesis.

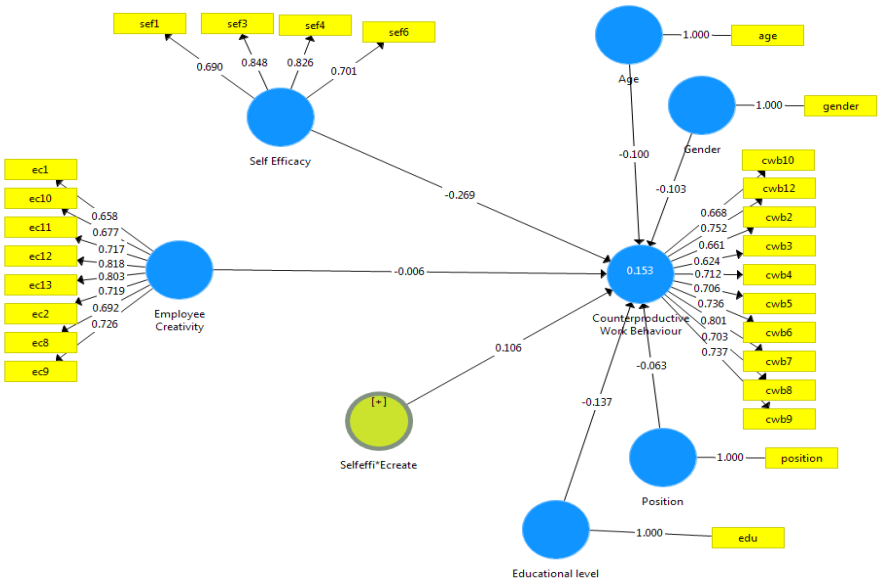


Figure 4. 6 - Moderation test for self-efficacy on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.16: Moderating Effect of Self-efficacy

Rival Models		**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age	→ CWB	-0.125**	-0.100**	-0.102**	-0.100**
Gender	→ CWB	-0.125**	-0.125**	-0.106**	-0.103**
Educational level	→ CWB	-0.164***	-0.157***	-0.130***	-0.137***
Position	→ CWB	-0.032	-0.051	-0.072	-0.063
Employee creativity	→ CWB		-0.174**	-0.027	-0.006
Self-efficacy	→ CWB			-0.282***	-0.269***
SE*EC	→ CWB				0.106*
R^2		0.054	0.082	0.136	0.153
ΔR^2			0.028	0.054	0.017

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderation slope presented in Figure 4.7 further highlights the fact that self-efficacy moderates the relationship between employee creativity and counterproductive work behaviour. From the figure, the three slopes are not parallel showing evidence of moderation.

Figure 4. 7 - Moderation slope showing the moderating effect of self-efficacy on employee creativity and counterproductive work behaviour.
Source: Field Data (2019).

The moderating effect of learning orientation on employee creativity and counterproductive work behaviour (H_{13})

The moderation effect of learning orientation on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.16 and figure 4.8. The R-square of the main structural model is 0.082 (Model 2), which increased marginally to 0.117 (Model 3) following the introduction of the moderator-learning orientation. The interaction effect of learning orientation with employee creativity had a negligible effect on the R-square resulting in a change in R-square of just 0.1%. Furthermore, the interaction of learning orientation with employee creativity had no significant effect on counterproductive work behaviour (β=0.026, t=0.498, p>0.05). This implies that learning orientation moderates employee creativity to increase counterproductive work behaviour, therefore hypothesis 13 **(H_{13})** is not supported in the present context. In effect, even though the study hypothesized that learning orientation will increase employee creativity and hinder its effect on CWB, the results show that while increasing employee creativity it also enhances employees' indulgence in CWB.

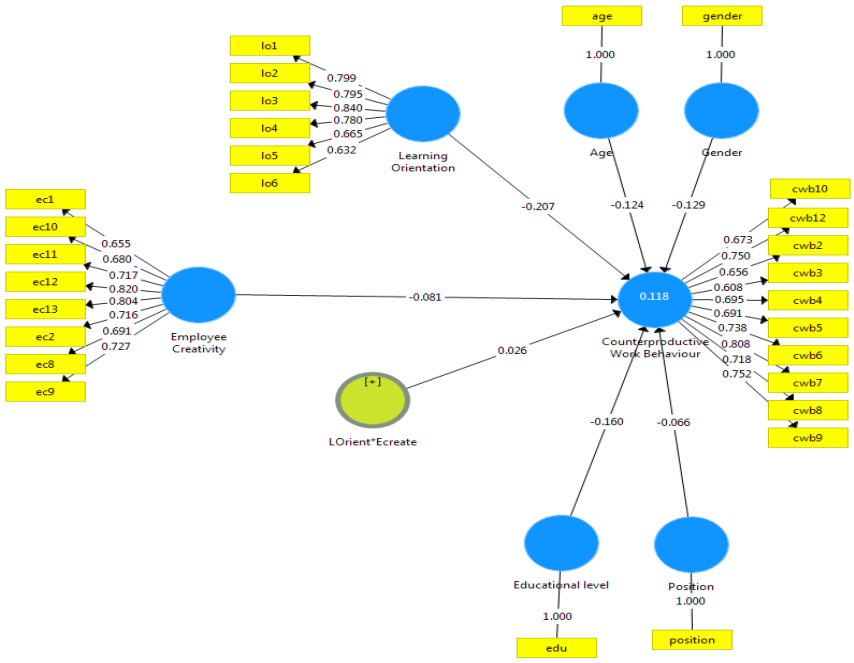


Figure 4. 8 - Moderation test for learning orientation on employee creativity and counterproductive work behaviour.

Source: Field Data (2019).

Table 4.17: Moderating Effect of Learning Orientation

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.124***	-0.124***
Gender → CWB	-0.125**	-0.125**	-0.130**	-0.129**
Educational level → CWB	-0.164***	-0.157***	-0.159***	-0.160***
Position → CWB	-0.032	-0.051	-0.067	-0.066
Employee creativity → CWB		-0.174**	-0.082	-0.081
Learning orientation → CWB			-0.211***	-0.207***
LO*EC → CWB				0.026
R^2	0.054	0.082	0.117	0.118
ΔR^2		0.028	0.035	0.001

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderating effect of performance orientation on employee creativity and counterproductive work behaviour (H_{14})

The moderation effect of performance orientation on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.17 and Figure 4.9. The R-square of the main structural model is 0.082 (Model 2), which increased marginally to 0.107 (Model 3) following the introduction of the moderator-performance orientation. The interaction effect of performance orientation with employee creativity had a negligible effect on the R-square resulting in a change in R-square of just 0.6%. Furthermore, the interaction of performance orientation with employee creativity had no significant effect on counterproductive work behaviour (β=-0.072, t=1.303, p>0.05). This implies that although it is not significant, performance orientation moderates employee creativity to decreasing counterproductive work behaviour, therefore hypothesis 14 (**H_{14}**) is not supported in the present context. This shows that while performance orientation will increase employee creativity, it will also hinder creative employees from engaging in CWB.

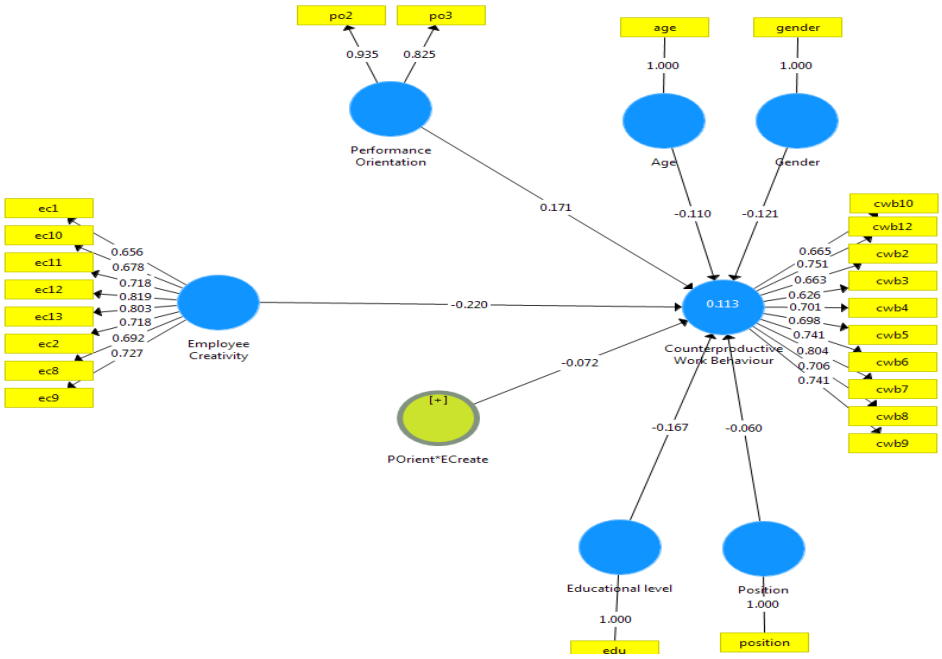


Figure 4. 9 - Moderation test for performance orientation on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.18: Moderating Effect of Performance Orientation

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.110**	-0.110**
Gender → CWB	-0.125**	-0.125**	-0.121**	-0.121**
Educational level → CWB	-0.164***	-0.157***	-0.164***	-0.167***
Position → CWB	-0.032	-0.051	-0.053	-0.06
Employee creativity → CWB		-0.174**	-0.203***	-0.220***
Performance orientation → CWB			0.160***	0.171***
PO*EC → CWB				-0.072
R^2	0.054	0.082	0.107	0.113
ΔR^2		0.028	0.025	0.006

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019).

The moderating effect of role ambiguity on employee creativity and counterproductive work behaviour (H_{15})

The moderation effect of role ambiguity on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.18 and Figure 4.10. The R-square of the main structural model is 0.082 (Model 2), which increased marginally to 0.111 (Model 3) following the introduction of the moderator-role ambiguity. The interaction effect of role ambiguity with employee creativity had a negligible effect on the R-square resulting in a change in R-square of just 0.1%. Furthermore, the interaction of role ambiguity with employee creativity had no significant effect on counterproductive work behaviour (β=-0.027, t=0.527, p>0.05). This implies that role ambiguity although not significant moderates employee creativity to increase counterproductive work behaviour, therefore hypothesis 15 (**H_{15}**) is not supported in the present context.

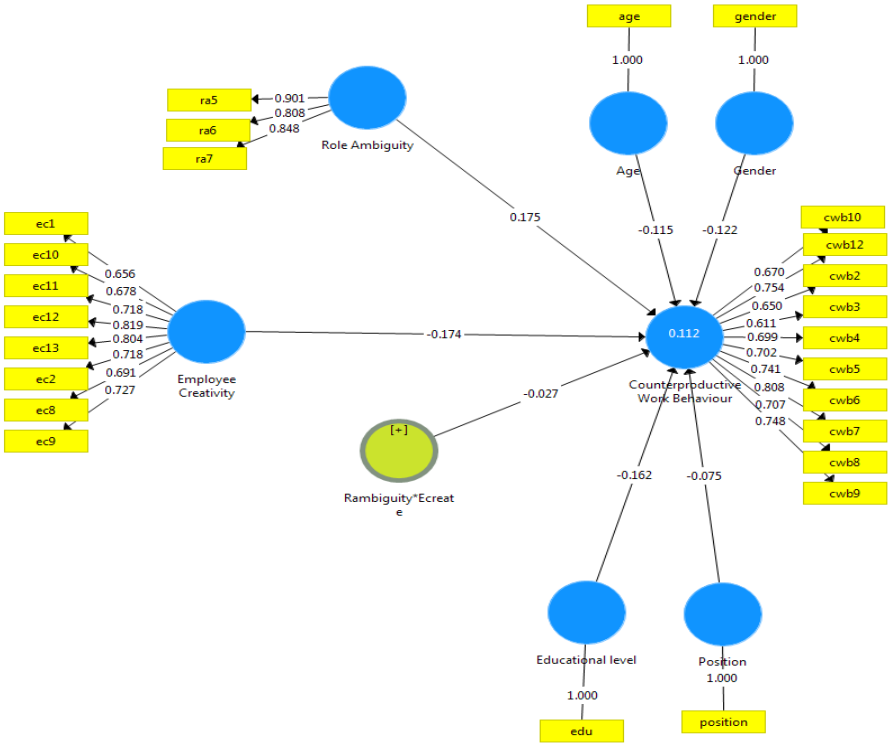


Figure 4. 10 - Moderation test for role ambiguity on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.19: Moderating Effect of Role Ambiguity

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.117**	-0.115**
Gender → CWB	-0.125**	-0.125**	-0.125**	-0.122**
Educational level → CWB	-0.164***	-0.157***	-0.159***	-0.162***
Position → CWB	-0.032	-0.051	-0.076	-0.075
Employee creativity → CWB		-0.174**	-0.168**	-0.174***
Role Ambiguity → CWB			0.173***	0.175***
RA*EC → CWB				-0.027
R^2	0.054	0.082	0.111	0.112
ΔR^2		0.028	0.029	0.001

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderating effect of transformational leadership on employee creativity and counterproductive work behaviour (H_{16})

The moderation effect of transformational leadership on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.19 and Figure 4.11. The R-square of the main structural model is 0.082 (Model 2), which increased to 0.147 (Model 3) following the introduction of moderator-transformational leadership. The interaction effect of transformational leadership with employee creativity further increased the R-square to 0.178 (Model 4) resulting in a change in R-square of about 3%. Furthermore, the interaction of transformational leadership with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.149, t=2.507, p=0.012<0.05). This implies that transformational leadership strengthens the relationship between employee creativity and counterproductive work behaviour. Therefore, the effect of employee creativity on counterproductive work behaviour is stronger when transformational leadership is high rather than low thus lending support to hypothesis 16 (**H_{16}**). In essence, the argument by the study transformational leadership will cause creative employees to increase their CWB is confirmed.

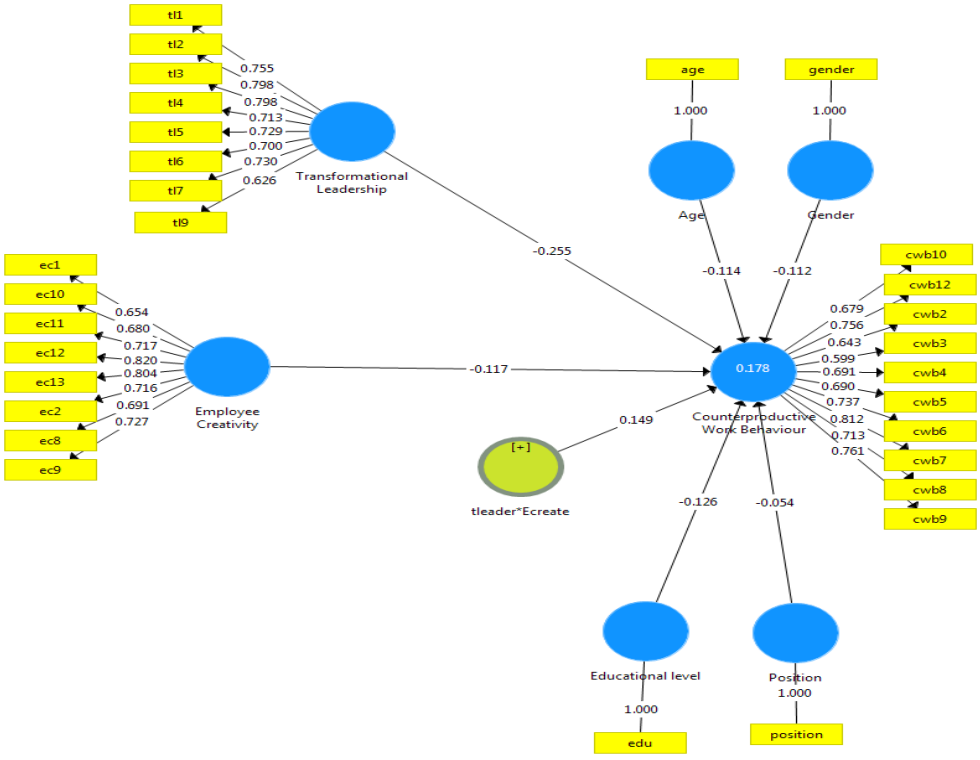


Figure 4. 11 - Moderation test for transformational leadership on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.20: Moderating Effect of Transformational Leadership

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.113**	-0.114**
	-0.125**	-0.125**	-	
Gender → CWB			0.131***	-0.112**
	-	-	-	-
Educational level → CWB	0.164***	0.157***	0.135***	0.126***
Position → CWB	-0.032	-0.051	-0.063	-0.054
Employee creativity → CWB		-0.174**	-0.116**	-0.117**
			-	-
Transformational leadership → CWB			0.262***	0.255***
TL*EC → CWB				0.149**
R^2	0.054	0.082	0.147	0.178
ΔR^2		0.028	0.065	0.031

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderation slope presented in Figure 4.12 further highlights the fact that transformational leadership moderates the relationship between employee creativity and counterproductive work behaviour. From the figure, the three slopes are not parallel showing evidence of moderation.

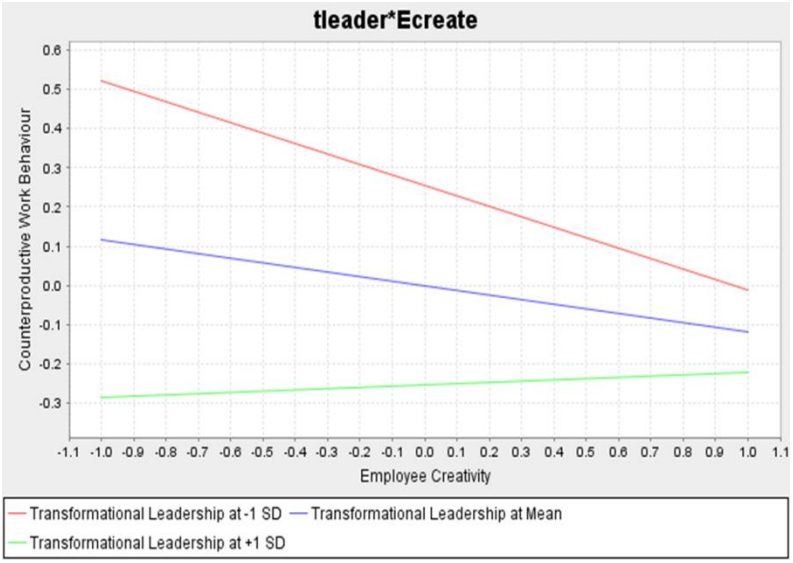


Figure 4. 12 - Moderation slope showing the moderating effect of transformational leadership employee creativity and counterproductive work behaviour.
Source: Field Data (2019)

The moderating effect of process control on employee creativity and counterproductive work behaviour (H_{17})

The moderation effect of process control on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.20 and Figure 4.13. The R-square of the main structural model is 0.082 (Model 2), which increased marginally to 0.113 (Model 3) following the introduction of the moderator-process control. The interaction effect of process control with employee creativity had a negligible effect on the R-square resulting in a change in R-square of just 1.5%. Furthermore, the interaction of process control with employee creativity had no significant effect on counterproductive work behaviour (β=0.099, t=1.626, p>0.05). This implies that process control moderates employee creativity to increase counterproductive work behaviour, therefore hypothesis 17 (**H_{17}**) is not supported in the present context. Consequently, this means process control will while hindering employee creativity will also cause employees to engage in CWB contrary to the study hypothesis that it will not do so.

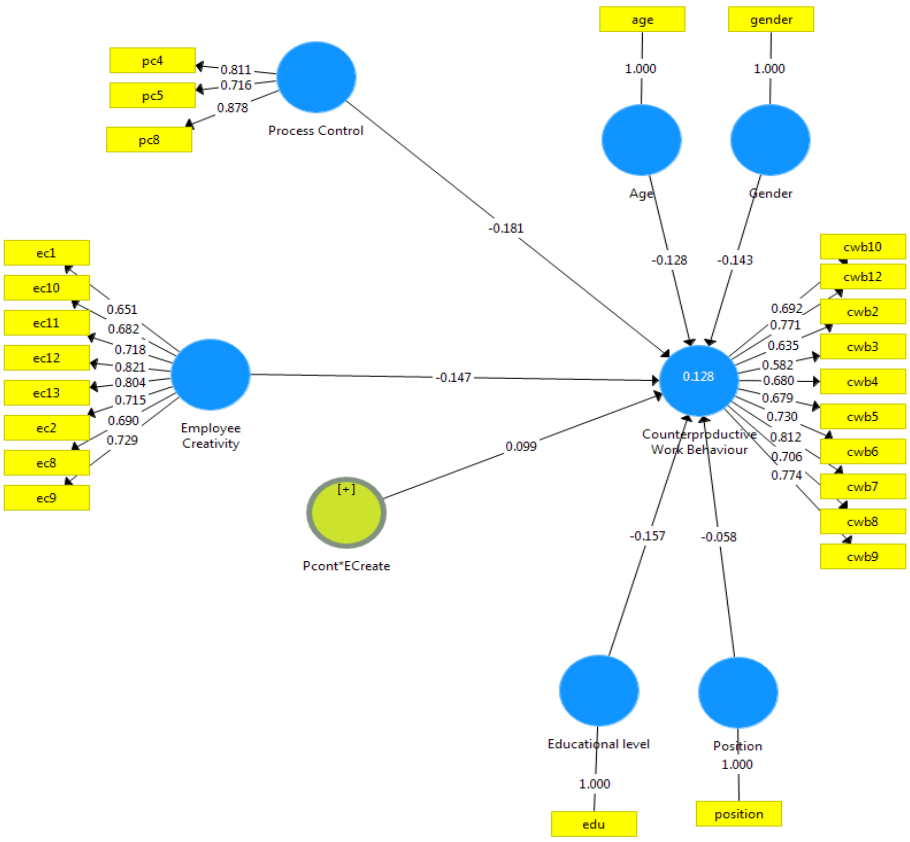


Figure 4. 13 - Moderation test for process control on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4. 21: Moderating Effect of Process Control

Rival Models		**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age	→ CWB	-0.125**	-0.100**	-0.120**	-0.128***
Gender	→ CWB	-0.125**	-0.125**	-0.140***	-0.143***
Educational level	→ CWB	-0.164***	-0.157***	-0.156***	-0.157***
Position	→ CWB	-0.032	-0.051	-0.060	-0.058
Employee creativity	→ CWB		-0.174**	-0.157**	-0.147**
Process control	→ CWB			-0.169***	-0.181***
PC*EC	→ CWB				0.099
R^2		0.054	0.082	0.113	0.128
ΔR^2			0.028	0.032	0.015

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderating effect of output control on employee creativity and counterproductive work behaviour (H_{18})

The moderation effect of output control on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.21 and Figure 4.14. The R-square of the main structural model is 0.082 (Model 2), which increased to 0.100 (Model 3) following the introduction of the moderator-output control. The interaction effect of output control with employee creativity further increased the R-square to 0.128 (Model 4) resulting in a change in R-square of about 3%. Furthermore, the interaction of output control with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.147, t=2.305, p=0.021<0.05). This implies that output control strengthens the relationship between employee creativity and counterproductive work behaviour. In this regard, output control while hindering employee creativity does also hinder CWB so that in effect, output neither increases employee creativity nor encourages CWB. This is contrary to the argument of the study that output controls will increase employee creativity while hindering CWB.

Therefore, the effect of employee creativity on counterproductive work behaviour is weaker when output control is low rather than high thus lending support to hypothesis 18 (**H_{18}**).

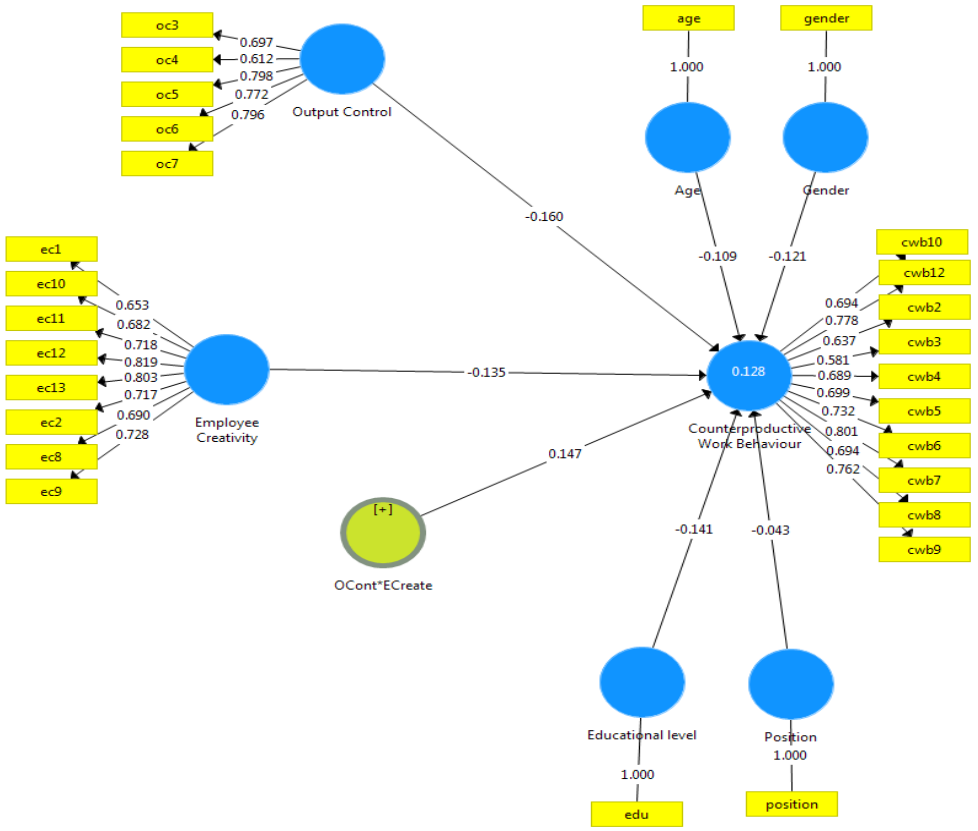


Figure 4. 14 - Moderation test for output control on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.22: Moderating Effect of Output Control

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.110**	-0.109**
Gender → CWB	-0.125**	-0.125**	-0.136***	-0.125**
Educational level → CWB	-0.164***	-0.157***	-0.147***	-0.141***
Position → CWB	-0.032	-0.051	-0.054	-0.043
Employee creativity → CWB		-0.174**	-0.156**	-0.135**
Output control → CWB			-0.125**	-0.160**
OC*EC → CWB				0.147**
R^2	0.054	0.082	0.100	0.128
ΔR^2		0.028	0.018	0.028

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderation slope presented in figure 4.15 further highlights the fact that output control moderates the relationship between employee creativity and counterproductive work behaviour. From the figure, the three slopes are not parallel showing evidence of moderation.

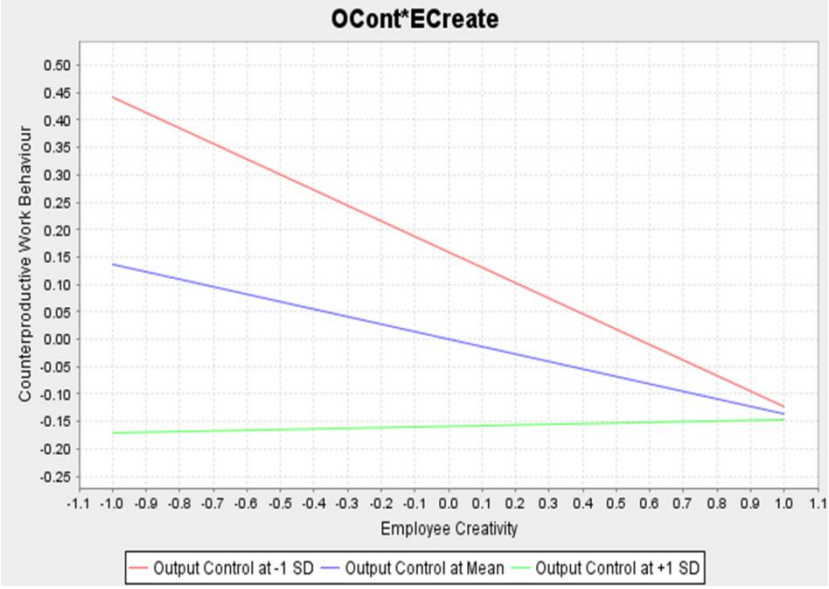


Figure 4. 15 - Moderation slope showing the moderating effect of output control on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

The moderating effect of achievement orientation on employee creativity and counterproductive work behaviour (H_{19})

The moderation effect of achievement orientation on the relationship between employee creativity and counterproductive work behaviour is shown in Table 4.22 and Figure 4.15. The R-square of the main structural model is 0.082 (Model 2), which increased to 0.138 (Model 3) following the introduction of the moderator-achievement orientation. The interaction effect of achievement orientation with employee creativity further increased the R-square to 0.156 (Model 4) resulting in a change in R-square of about 2%. Furthermore, the interaction of achievement orientation with employee creativity had a significant positive effect on counterproductive work behaviour (β=0.104, t=1.900, p=0.057<0.10). This implies that achievement orientation strengthens the relationship between employee creativity and counterproductive work behaviour. Consequently, this confirms the argument put forth by the study that achievement orientation will prevent creative employees from engaging in CWB. Therefore, the effect of employee creativity on counterproductive work behaviour is

stronger when achievement orientation is high rather than low thus lending support to hypothesis 19 (**H_{19}**).

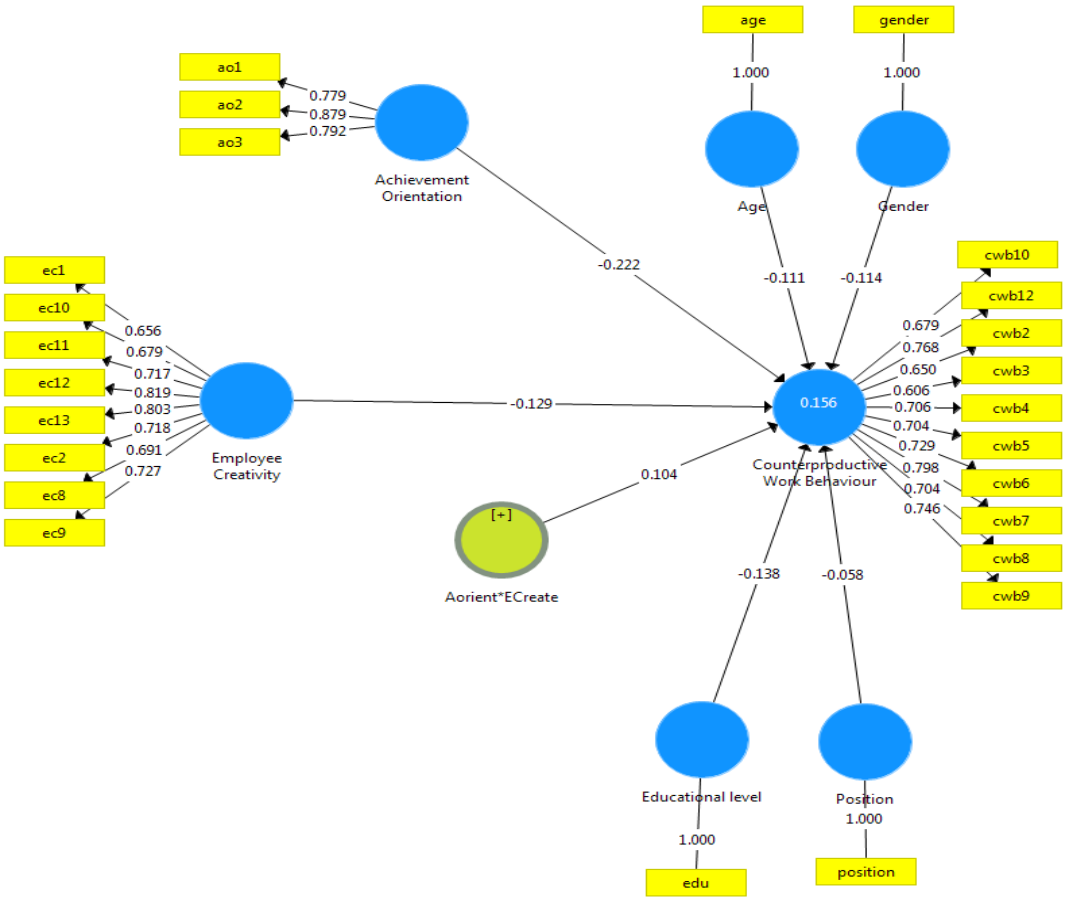


Figure 4. 16 - Moderation test for achievement orientation on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

Table 4.23: Moderating Effect of Achievement Orientation

Rival Models	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Age → CWB	-0.125**	-0.100**	-0.116**	-0.111**
Gender → CWB	-0.125**	-0.125**	-0.134***	-0.114**
Educational level → CWB	-0.164***	-0.157***	-0.138***	-0.138***
Position → CWB	-0.032	-0.051	-0.065	-0.058
Employee creativity → CWB		-0.174**	-0.116*	-0.129**
Achievement orientation → CWB			-0.246***	-0.222***
AO*EC → CWB				0.104*
R^2	0.054	0.082	0.138	0.156
ΔR^2		0.028	0.056	0.018

Note:***Significant at p<0.01;**Significant at p<0.05; *Significant at p<0.10

Source: Field Data (2019)

The moderation slope presented in Figure 4.17 further highlights the fact that achievement orientation moderates the relationship between employee creativity and counterproductive work behaviour. From the figure, the three slopes are not parallel showing evidence of moderation.

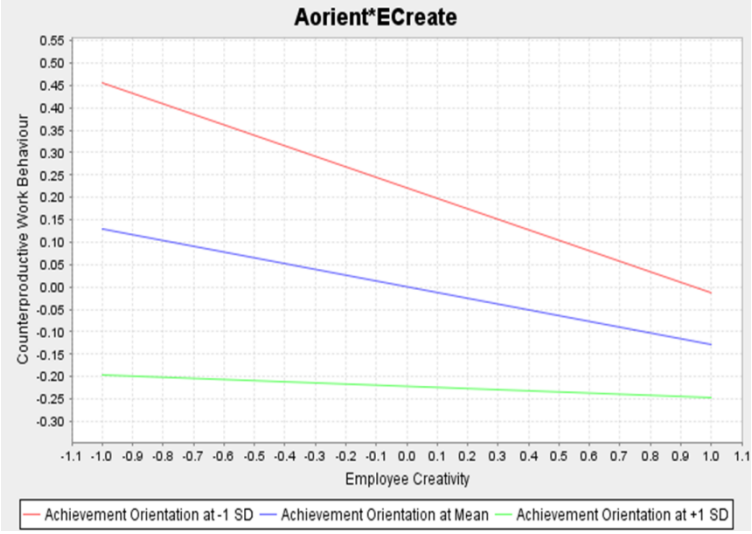


Figure 4. 17 - Moderation slope showing the moderating effect of achievement orientation on employee creativity and counterproductive work behaviour.

Source: Field Data (2019)

4.8 Summary of Hypotheses Test Results

Table 4.23 provides a summary of the hypotheses test and conclusions made in this study. Of the nineteen hypotheses, nine are supported in the present context.

Table 4. 24: Summary of Hypotheses Assessment

Propositions	Definition	Standard Beta	Bootstrap t-value	Hypothesis results
H1	Role identity is positively related to employee creativity	0.185***	2.882	Supported
H2	Self-efficacy is positively related to employee creativity	0.306***	5.748	Supported
H3	Learning orientation is positively related to employee creativity	0.230***	3.598	Supported
H4	Performance orientation is negatively related to employee creativity	0.110**	2.255	Not Supported
H5	Role ambiguity is negatively related to employee creativity	0.015	0.299	Not Supported
H6	Transformational leadership is positively related to employee creativity	0.007	0.097	Not Supported
H7	Achievement orientation is positively related to employee creativity	0.023	0.318	Not Supported
H8	Process control is negatively related to employee creativity	-0.103*	1.719	Supported
H9	Output control is positively related to employee creativity	0.036	0.656	Not Supported
H10	Employee creativity is positively related to the counterproductive work behaviour of employees in an organization	-0.174**	2.472	Not Supported
H11	The positive effect of employee creativity on counterproductive work behaviour is weaker when role identity is low rather than high	0.173***	2.391	Supported
H12	The positive effect of employee creativity on counterproductive work behaviour is weaker when self-efficacy is low rather than high	0.106*	1.792	Supported
H13	The positive effect of employee creativity on counterproductive work behaviour is weaker when learning orientation is low rather than high	0.026	0.498	Not Supported
H14	The positive effect of employee creativity on counterproductive work behaviour is stronger when performance orientation is high rather than low	-0.072	1.303	Not Supported
H15	The positive effect of employee creativity on counterproductive work behaviour is weaker when role ambiguity is high rather than low	-0.027	0.527	Not Supported
H16	The positive effect of employee creativity on counterproductive work behaviour is stronger when transformational leadership is high rather than low	0.149**	2.507	Supported
H17	The positive effect of employee creativity on counterproductive work behaviour is weaker when process control is high rather than low	0.099	1.626	Not Supported
H18	The positive effect of employee creativity on counterproductive work behaviour is weaker when output control is low rather than high	0.147**	2.305	Supported
H19	The positive effect of employee creativity on counterproductive work behaviour is stronger when achievement orientation is high rather than low	0.104*	1.900	Supported

Note: ***Significant at p<0.01; **Significant at p<0.05; *Significant at p<0.10

4.9 Chapter Summary

This chapter sought to find answers to the study hypotheses. The hypotheses were tested using PLS-SEM for the model linking personal and supervisory factors with employee creativity and subsequently counterproductive work behaviour. The study found a positive and significant relationship between role identity and employee creativity, self-efficacy, and employee creativity, learning orientation and employee creativity, and performance orientation and employee creativity. This implies that all the personal factors had a positive effect on employee creativity. For supervisor factors, only process control had a significant negative effect on employee creativity.

Also, a notable finding was the fact that employee creativity was negatively related to counterproductive working behaviour, implying that more creative employees tend to engage less in counterproductive work behaviour. Concerning the moderating hypotheses, among the personal factors, both role identity and self-efficacy had significant positive moderating effects on the relationship between employee creativity and counterproductive work behaviour. Among the supervisory factors, transformational leadership, output control, and achievement orientation all had significant positive moderating effects on the relationship between employee creativity and counterproductive work behaviour.

CHAPTER FIVE

Discussion and Conclusions

5.1 Introduction

This chapter discusses the results of the data collected and analyzed in light of the relationships and hypotheses formulated based on the study objectives. Even though the vast available literature suggested that employee creativity promotes organizational performance, current limited empirical evidence reveals that employee creativity has a dark side that must be considered. Drawing from these researches (Gino & Ariely, 2012; Vincent & Kouchaki, 2015), the study argued that if employee creativity which contributes to positive outcomes for an organization can also lead to counterproductive work behaviour (CWB) thereby hindering organizational performance, then this is a paradox which must be examined.

To understand this dark side of employee creativity and paradox better, the study examined first the effect of employee creativity on counterproductive work behaviour and most importantly whether factors that affect employee creativity also moderate its effect on CWB. Overall, the results show support for nine (9) out of nineteen (19) hypotheses and the findings confirm that a paradox does exist in the relationship between employee creativity and CWB. Consequently, this chapter discusses the findings of the study providing empirical evidence highlighting the argument that under some conditions, the antecedents of employee creativity affect CWB and therefore employee creativity may not always enhance performance. It also looks at the theoretical and practical implications of the study, the limitations encountered and future studies required to broaden research further in this field.

5.2 Study Findings and Discussions

5.2.1 Key Findings and Discussions

Consistent with the study's objectives, the findings from the study provided insight into why the antecedents of employee creativity might provide conditions under which employee creativity enhances or hinders CWB, therefore, becoming detrimental to performance. Consequently, the study results revealed key findings which are classified into four main categories namely: 1) Factors that enhance employee creativity and enhance its effect on

CWB (e.g. learning orientation and role ambiguity), 2) Factors that enhance employee creativity but hinder its effect on CWB (e.g. role identity, self-efficacy, and performance orientation), 3) Factors that hinder employee creativity but enhance its effects on CWB (e.g. transformational leadership, achievement orientation, and process control) and lastly, 4) Factors that hinder employee creativity and hinder its effect on CWB (output control). Thus, theoretically, this study's findings give an understanding of why some antecedents of employee creativity might provide conditions under which employee creativity will enhance CWBs and also under which they will hinder CWBs from occurring. Furthermore, these findings affirm earlier studies which suggested that the antecedents of employee creativity such as personal characteristics and supervisor factors may affect employee creative acts and have linkages to work performance and output (Amabile, 1996; Oldham & Cummings, 1996; Tang & Chang, 2012, Tsai et al., 2015). The details of these key findings are discussed as follows below.

1) Factors that enhance employee creativity and enhance their effect on CWB

The findings of the study revealed that some antecedents of employee creativity such as learning orientation and role ambiguity while increasing employee creativity would also enhance its effect on CWB. The study results showed that whereas learning orientation, which was hypothesized to increase employee creativity, was supported, role ambiguity, which was hypothesized as hurting employee creativity, was not supported. In effect, role ambiguity affects employee creativity positively contrary to the study argument raised. Similarly, the moderating effect of the two hypothesized constructs on the relationship between employee creativity and CWB was equally not supported as the study found them rather enhancing CWB.

From these results, the study found that learning orientation has a positive effect on employee creativity. This is consistent with Goal Orientation Theory, which suggests that learning orientation indicates a fundamental interest in task engagement, and mastering task performance that leads to creativity (Janssen & Van Yperen, 2004). Thus, the study's argument from earlier studies is that employees with a high learning orientation are intrinsically motivated and will persist in creative processes (Shalley et al., 2004; Zhang & Bartol, 2010) to put in their best to achieve their goals is affirmed by the findings. Regarding the moderating role of learning orientation on the effect of employee creativity on CWB, the study's findings indicate that it will enhance the effect of employee creativity on CWB. This

contradicts the study hypothesis that learning orientation will hinder the effect of employee creativity on CWB. Consequently, despite the suggestion from the literature that employees with learning orientation normally develop an inherent interest in understanding the task domain and therefore can generate new ideas and be creative (Hirst et al., 2011; Huang & Luthans, 2014), this trait rather enhances their engagement in CWBs. This signifies that from the perspective of Goal Orientation Theory, although learning-oriented employees may be intrinsically motivated to put up their best to achieve set goals, they may not necessarily avoid counterproductive work behaviour. Thus, the study argument on the moderating effect of learning orientation on employee creativity on CWB is not supported as portrayed under this condition because the findings proved otherwise as it enhances employee creativity while its effect on employee creativity will also enhance CWBs.

Regarding this condition, it has been argued in prior researches that learning-oriented employees are motivated to learn and seek out tasks that are challenging because these provide greater opportunities for development (Gong et al., 2009; Hirst et al., 2011). However, centralization reduces opportunities to explore and learn thereby diminishing employees' control which inhibits or removes the creative benefits of a learning orientation that is derived from intrinsically motivated engagement with work challenges (Hirst et al., 2011). Besides centralization, the literature again argues that a highly formalized team environment restricts learning orientation on creativity such that learning-oriented employees working under this condition have less discretion to express their inclination to try new approaches (Hirst et al., 2011, Tett & Burnett, 2003). Thus, such a restrictive formalized environment that takes control and intrinsic motivation from employees with a learning orientation may likely lead to CWBs as their inability to exercise their character will lead to a propensity to flout formalized work processes and conditions. This argument is consistent with the study findings that learning orientation moderates the effect of employee creativity on CWB to enhance it.

Similarly, the findings revealed that role ambiguity, which was suggested, to harm employee creativity and hinder CWBs did not receive support. Rather, the study found that role ambiguity will increase employee creativity whilst it moderates the effect of employee creativity on CWBs to enhance it. This is supported by some studies which have suggested that when experiencing role ambiguity, employees' capability to make effective contributions to their organization's success through creative activities might be thwarted

along with their intrinsic motivation to perform such activities (Eatough, Chang, Miloslavic, & Johnson, 2011; Ryan & Deci, 2000). Then again, the energy-draining effect of role ambiguity may compromise employees' creative activities because of the absence of drive or stamina to develop new ideas for organizational improvement (Groza, Locander & Howlett, 2016; Quinn, Spreitzer & Lam, 2012). The study argument relied on studies that indicated that role ambiguity results from a dearth of information, which creates a lack of clarity in job definitions causing employees to be uncertain about their specific job functions and are not, therefore, challenged to be creative (Schmidt et al., 2014; Tang & Chang, 2010). On the contrary, the findings revealed that role ambiguity increases employee creativity. This may probably be because in the context of the advertising industry, as creativity is in high demand, employees may be forced to be creative to stay focused, be relevant and enhance their performance to achieve results thereby increasing their creativity.

Again, the study argued that role ambiguity would moderate the effect of employee creativity to hinder CWB when it is high rather than low, which was also not supported. The study argued that role ambiguity when it is high will not cause creative employees to engage in CWBs because they are not privy to the job requirements and boundaries of operation and would therefore not intentionally go against organizational principles and processes. Contrary to this argument, the findings observe that role ambiguity affects employees to enhance CWB because of the absence of defined roles, which makes them unaccountable for their misconduct. Furthermore, in the context of the advertising industry, for instance, employee creativity may require thinking outside the box and doing things out of the ordinary or acting against the norm (Brenkert, 2009; Runco, 2010). This leads to an increase in creativity on one hand while CWB is enhanced on the other hand as employees go against the norm to achieve results. However, it must be noted that from the data analysis, role ambiguity's effect on the relationship between employee creativity and CWB was insignificant (β=-0.027, t=0.527, p>0.05), as such its effect is not likely to have as much effect as envisaged. However, earlier studies suggest that because goals are an important factor in employee creativity, role ambiguity may lead to stress, which can cause CWB (Tang & Chang, 2010; Penny & Spector, 2005). Thus, even though the study findings did not support the hypothesis in the context of the advertising industry, it is likely the effect of role ambiguity on employee creativity will enhance CWB under this condition.

2) Factors that enhance employee creativity but hinder its effect on CWB

In this category, role identity, self-efficacy, and performance orientation were found as the factors, which enhance employee creativity but hinder its effect on CWB. Unlike role identity and self-efficacy which the study argued enhances employee creativity and hinders CWB, which were confirmed by the findings, performance orientation argued to harm employee creativity and enhance CWB was not supported. In the case of role identity, this finding is consistent with the study hypotheses and arguments that role identity has a positive effect on employee creativity (Erkutlu & Chafra, 2015). Furthermore, where creative employees with a high role identity receive affirmation of their creativity, they will not engage in acts contrary to their identity and thereby not indulge in CWBs (Tierney & Farmer, 2011). Therefore, as supported by Social Exchange Theory, role identity, which depends mostly on feedback received from supervisors and co-workers, will cause such employees with this trait to act in agreement with what they believe about themselves. This finding also emphasizes previous studies on the relationship between role identity, employee creativity, and job performance that role identity will increase creativity and performance (Erkutlu & Chafra, 2015; Tierney & Farmer, 2011).

Self-efficacy, on the other hand, has been identified in the literature to have a positive relationship with employee creativity while hindering CWBs as argued by the study and this is reflected by the findings of the analysis (Richter et al., 2012; Tierney & Farmer, 2011). For instance, consistent with prior studies, self-efficacy causes an employee to envisage an outstanding performance in any situation (Bandura, 1977; Jaiswal & Dhar, 2015) causing them to be creative. It also brings intrinsic belief and motivation to perform the job successfully (Bandura, 1997), which evidently will prevent any engagement in acts of counterproductive work behaviours. Thus, whilst employees with a strong self-efficacy can surmount difficulties in their task performance and seek creative ways to successfully carry out their job functions (Tierney & Farmer, 2002), it also indicates that a stronger perceived self-efficacy positively influenced employees' creative involvement at work and therefore enhances work performance (Carmeli & Schaubroeck, 2007). Such employees in wanting to prove their creative abilities and competence will not indulge in CWBs as it will be inconsistent with their belief in themselves. The findings of the study, therefore, confirm this argument that self-efficacy will increase employee creativity and hinder its effect on CWB.

Regarding, employees with performance orientation the study argued from prior literature that they will not engage in creativity because such employees will focus more on tasks with a desire to prove their ability to others (Zhang et al, 2018). They would, therefore, be more concerned with accomplishing high performance than being creative. This is because their goal orientation is motivated by external outcomes related to performance and as such directed towards achieving a set objective. Interestingly, the study findings did not support this argument but instead found that performance orientation will make employees more creative. This may be because as creativity is a booster to performance (Anderson, Potočnik & Zhou, 2014), employees with such a trait may see creativity as an avenue to show how much they can perform their functions and will, therefore, undertake creative activities. Therefore, the desire to achieve high performance will make them inclined to creativity. This can also be explained from the view of the Ghanaian context where employees are usually competitive and would want to get ahead of their co-workers for recognition and promotion. Thus, this indicates that performance-oriented employees while concerned with achieving the outcomes of high performance may rather be creative contrary to the study hypothesis.

Similarly, the study findings did not support the argument that performance orientation will moderate employee creativity to enhance counterproductive work behaviours. It is rather found that, because employees with performance orientation always seek to attain favorable judgments and external outcomes associated with performance and give more concern to achieving the outcomes of high performance (Hirst, van Knippenberg & Zhou, 2009), they will therefore not engage in CWBs. Again, contrary to the study argument, while creative employees with performance orientation exhibit an affective task immersion, a high level of aspiration and reasoning and avoid situations that will prevent them from attaining their performance goal, they will not engage in CWB (Gong, Huang & Farh, 2009; Hirst, van Knippenberg, Chen & Sacramento, 2011). Consequently, theoretically from the study, performance orientation provides conditions under which it will increase employee creativity and its effect on employee creativity will hinder CWB.

3) Factors that hinder employee creativity but enhance its effects on CWB

This section of the discussion looks at the factors that moderate the relationship between employee creativity and counterproductive work behaviours such that they provide conditions under which they hinder employee creativity but enhance its effect on CWBs. The antecedents that fall into this category are transformational leadership, achievement

orientation, and process control. In the first instance, the study found that transformational leadership does not increase employee creativity as proposed. The findings rather implied that contrary to the study's argument that transformational leadership provides a conducive environment for employees to put in extra effort to achieve new solutions (Wang, Tsai & Tsai, 2014), they will not be more creative in their performance. However, this finding is contrary to the Social Exchange Theory (SET), the underlying theory for this scenario. The study adopted SET for reasons that because transformational leaders provide a conducive environment for their subordinates to perform their duties, they will likely reciprocate this by using such opportunities and flexibility to be creative. It happens this is not the case as the study found that transformational leadership does not necessarily enable employees to increase their creativity. Even though transformational leadership has been suggested to enhance employees' creativity, several studies reveal that transformational leadership influences employee creativity positively only under certain conditions (Eisenbeiß & Boerner, 2013; Herrmann & Felfe, 2013; Jaiswal & Dhar, 2015). For an instance, meta-analytic research conducted by (Herrmann & Felfe, 2013) revealed that the relationships between transformational leadership and creativity were strong when task novelty was high rather than low and when employees have a high personal initiative than when they were low in the personal initiative, thus, indicating that the impact of transformational leadership on employee creativity depends on task and follower characteristics. Similarly, according to Jaiswal & Dhar (2015), transformational leaders can more effectively engage their subordinates in creative behaviour if their subordinates perceive a conducive climate for innovation from their organization. Likely, this situation is equally the case in the Ghanaian context as portrayed in the results of the study in that employees' dues to respect for leadership will rather not go ahead of their leaders to take some initiatives. The study, therefore, concludes that such conditions may be the reason for the negative effect of transformational leadership on employee creativity which was not considered.

In the case of the moderation of transformational leadership on employee creativity and its effect on CWB, the study reveals that it enhances CWB. Even though attributes of transformational leaders create room through motivations, opportunities, and rewards for employees to operate freely and be confident, they are still likely to engage in CWBs. This may result because as transformational leaders set broad goals and rewards in a mutual exchange relationship with employees (Shin & Zhou, 2003; Wang, Tsai & Tsai, 2015) which enables them to explore their talents, it also creates room for employees to take advantage of

such opportunities to engage in CWBs. This may also be attributed to the relaxed environment provided to encourage employees to explore their capabilities. Thus, contrary to SET reasoning that because transformational leaders provide a conducive environment for their subordinates to perform their duties, they will likely reciprocate this by not engaging in counterproductive behaviours, it is not the case. Consequently, the findings point out transformational leadership rather hinders employee creativity and enhances its effect on CWB. Furthermore, the study finds this as one condition where the argued employee behaviour differs from the adopted underlying theory.

Regarding achievement orientation, the study's findings were contrary to the argument that since employees having this trait tend to believe in their ability to surmount difficulties, they will usually engage in creativity. The literature points out that employees with a high achievement orientation see themselves as skillful and are concerned with excelling and outperforming others (Yi & Wang, 2015) which may explain their low creativity. This may be because they consider themselves already competent to carry out their duties and will not strive to be creative. Nonetheless, in the case of the argument that achievement orientation will moderate the effect of employee creativity to enhance CWBs, it was supported. As suggested by Avery, Simillie, and Fife-Schaw (2015), in line with Goal Orientation theory, employees with achievement orientation engage in work behaviours with a specific competence purpose to overcome work challenges. As a result, they can manage job insecurities by adopting strategies that produce positive performance output because they believe in their competence to overcome difficulties (Yi & Wang, 2015). This belief in themselves suggests that employees with achievement orientation, in their drive to prevent others from thinking they are not capable of handling a job function will utilize all available means to reach their goals which may be counterproductive. Consequently, the study in its findings is consistent with the literature, which affirms that achievement-oriented employees because of their drive to attain their goals even in the face of challenges in their job functions (Avery, Smillie & Fife-Schaw, 2015; Yi & Wang, 2015), will likely engage in CWBs. This can be explained by the fact that they would want to achieve positive work outcomes by all means necessary. Thus, this finding proves that the presence of achievement orientation will moderate employee creativity to enhance CWB.

Similarly, under conditions of process control, whilst the study's argument indicated that it will not increase employee creativity is supported, its hypothesized moderating effect on

employee creativity to hinder counterproductive work behaviour was not supported. Earlier studies have advocated that control practices mostly ensure that employees are given information and direction on relevant performance standards to stimulate efficiency (Sitkin, Cardinal & Bijlsma-Frankema, 2010). For example, process control according to some authors increases the amount of discipline and care exercised by employees in their work processes to ensure they are done in line with supervisory goals (Carbonell & Rodríguez-Escudero, 2015; Schultz, Salomo, de Brentani & Kleinschmidt, 2013). It must, however, be recognized that such mechanisms even though as indicated by TCA will lead to efficient systems of operation, will hinder opportunistic behaviour and discourage "thinking outside the box" which will endanger creativity. Consequently, the findings affirm this fact that in conditions of process control, employees are not adequately challenged because they have to follow laid down the work process and therefore it will not increase employee creativity.

On the other hand, despite that process control increases the amount of discipline and care employees will undertake in their line of work thereby ensuring such activities are executed in line with supervisory goals (Rodríguez-Escudero, Carbonell & Munera-Aleman, 2010), this may lead to CWB for creative employees. This is because process control conditions may stifle and constrain creative employees, as they have to work with little job flexibility and autonomy, which goes against the grain of their explorative nature and tendency to think "outside the box". Under such circumstances, it can cause them to act contrary to work procedures and processes thereby engaging in counterproductive work behaviour. Then again, going by TCA, process control shifts performance risk to the supervisor and this, therefore, provides a conducive environment for creative employees to flout regulations and ethics, and engage in CWBs harmful to their performance (Atuahene-Gima & Li, 2002). Thus, the findings observe that contrary to the study's argument, process control's effect on employee creativity will enhance CWBs instead of hindering it.

4) Factors that hinder employee creativity and hinder its effect on CWB

The last of the categories within which the effect of the antecedents of employee creativity also affects CWB is the condition under which factors that hinder employee creativity also hinder CWB. Interestingly, the findings suggest that only one of the constructs, output control falls within this category. Output control was found to both hinder employee creativity and hinder its effect on CWB. The study had hypothesized that it will enhance employee creativity which was not supported whilst its postulated moderating effect on

employee creativity hindering CWBs was supported. In effect, this means that altogether, output control neither increases employee creativity nor encourages creative employees to enact counterproductive work behaviours.

Unlike process control, prior studies advocate that since output controls aim more at achieving targets, employees have some amount of discretion as to how to perform their duties and thus will be more creative. In contrast, study findings prove otherwise as it revealed that even though as indicated in TCA, the burden of following particular procedures is removed from employees providing opportunities to be creative, it will not boost employee creative activities as envisaged. This may probably be because since employees are not compelled to perform under required rules and regulations in their work processes, focus shifts to the demands of meeting targets rather than being involved in creative ventures. Thus, the findings reveal that output does not increase employee creativity as predicted by the study hypothesis as it will cause employees to be less inclined to engage in creative activities.

On the other hand, the findings confirm that output control will moderate employee creativity to hinder CWB. This is because output control provides feedback essential for employees which gives them confidence and belief in the organization, increasing their enthusiasm to adjust efforts to maximize their competencies (Verburg et al, 2017). Equally, competition among employees will discourage opportunist behaviours likely to prevent them from achieving their targets. This is consistent with TCA which suggests that when the environment of exchange permits opportunism, it stands to reason that parties involved in the exchange evaluate the benefits and cost of opportunistic behaviour (Atuahene-Gima & Li, 2002) and act accordingly. It must also be noted in this instance that, unlike process control, output control shifts performance risk to the employee. Going by the dictates of TCA, it will therefore not be attractive for the creative employee to engage in opportunistic behaviour that will be counterproductive and negatively affect performance. Consequently, while output control does not encourage employees to engage in creative activities, at the same time it provides no impetus to engage in opportunistic behaviours which may be counterproductive. In the context of the advertising industry, this may be because employees are already creative in their job functions and therefore are more focused on delivering their targets and thus will not engage in counterproductive work behaviours. In effect, the study

found that in the advertising industry, output control will hinder employee creativity and likewise hinder its effect on CWBs.

Overall, these findings are important as they highlight conditions under which the paradox in the relationship between employee creativity and CWB occurs such that the effect of antecedents of employee creativity affects CWB. It also fulfills the objective of the study which seeks to examine the relationship between employee creativity and CWB. Furthermore, the dark side of employee creativity is confirmed as the factors that affect employee creativity also moderate its effect on CWB.

5.2.2 General Overview and Discussions

Apart from the key findings discussed above, the study notes that contrary to the study arguments, the relationship between employee creativity and counterproductive work behaviour predicted as positive was not supported (β=-0.174, t=2.472, $p<0.01$). This, therefore, indicates that despite findings from the earlier studies that employee creativity leads to dishonesty (Gino & Ariely, 2012; Gino & Wiltermuth, 2014), unethical behaviour (Kouchaki & Desai, 2015), entitlement, and cheating (Vincent & Kouchaki, 2015), the relationship between employee creativity and CWB was negative. Essentially, from current studies, however, indications of the relationship between employee creativity and CWB have been inconclusive, as scholars have argued for both a positive and negative effect (Ng & Yam, 2019; Harari et al., 2016). For instance, Ng & Yam (2019) have argued both ways that "perceived creative credit is associated with greater creativity-driven norm-breaking motives and greater entitlement motives, which in turn should increase deviance. On the other hand, perceived creative credit is associated with greater image preservation motives, which in turn should decrease deviance". They also found that based on self-enhancement theory, employees perceived creative credit generates multiple psychological motives that lead to deviance, and rewards for creativity is one factor mediating the positive or negative relationship between employee creativity and CWB. Thus, while the first part of their argument aligns with the study hypothesis and contradicts the findings, the second part contradicts the study argument but is consistent with the findings.

Similarly, Harari et al. (2016) argued, on one hand, contrary to the study findings that employees can enact behaviours that are counterproductive to the effective functioning of

the organization. This is because creative employees can be detracted from the effective functioning of the organization by engaging in behaviours on the job referred to as CWBs such as absenteeism, loafing, and theft. In the same study, however, they again suggest that from their study results across the sample, Creative and Innovative Performance (CIP) is negatively related to CWB. This is based on suggestions from studies conducted by Viswesvaran (2002, p.5), which states "records of absenteeism are negatively related to the supervisory assessment of employee effort and interpersonal behaviour". Thus, the inability of creative employees to gain the support of their supervisors, detrimental to their CIP negatively influences any engagement in CWBs" which is consistent with this study's findings. In effect, these two studies both show that the effects of employee creativity on job performance especially CWB have been unclear and contradictory.

Relatively, the findings revealed that conditions created through the moderating effect of antecedents of employee creativity on CWB are responsible for the paradox existing between the two constructs. Both employees and supervisors through self-report and other-report to determine if these traits and behaviour exist among the employee respondents rated these constructs. The descriptive analysis results for these constructs revealed an approximate mean of 4 and 1 obtained for employee creativity and counterproductive work behaviours respectively. This result confirmed creativity among the employees but revealed that they exhibited low CWB. Furthermore, the results showed there was not much difference between the results of the self-report (β=-0.174, t=2.472, $p<0.01$) and supervisor report (β=-0.346, t=4.979, $p<0.01$) in that both showed a negative effect of employee creativity on counterproductive work behaviours.

Secondly, the findings of the study established that all the personal characteristics (self-efficacy, role identity, and learning and performance orientation) have statistically significant means higher than 3 for all its factors, unlike supervisory factors that had lower means (higher than 3 for four out of five factors). Prior studies posit that mean and variance are the most fundamental statistics for understanding measures, their meaning, and the relationship among variables (Schneider & Schmitt, 1986; Ostroff & Fulmer, 2014). Even though researchers tend to focus on the mean in interpreting results and drawing conclusions, with little regard to the amount of variance in the constructs of interest, degree, and form of variance can be used as a predictor or outcome variable in research (Ostroff & Fulmer, 2014).

Consequently, the findings of the study revealed that personal characteristics generally accounted for more variance in employee creativity although minimal than supervisor factors. For instance, role identity (β=0.185), self-efficacy (β=0.306), learning orientation (β=0.230) and performance orientation (β=0.110) under personal characteristics showed higher beta (β) values than role ambiguity ((β=0.015), transformational leadership (β=0.007), achievement orientation (β=0.023), process control (β=0.103) and output control (β=0.110) under supervisor factors. This reveals that the degree of changes in employee creativity is greater for each of the personal characteristics than for the supervisor factors. Thus, personal characteristics have a greater effect on employee creativity than supervisor factors. This is consistent with prior studies conducted by Anderson, Potočnik, and Zhou (2014) who suggested that intrinsic motivation which stems from an individual's characteristics is one of three major components contributing to employee creativity. Similarly, Oldham & Cummings (1996), utilized the Creative Personality Scale (CPS) to assess employees' creativity-related personal characteristics in examining the effect of the CPS on employee creativity and found that individuals are most creative when they experience a high level of intrinsic motivation. In the theoretical sense, the study, therefore, enforces this notion that personal characteristics do indeed increase employee creativity as supported by the findings from all the four factors of personal characteristics of role identity, self-efficacy, learning orientation, and performance orientation.

5.3 Theoretical Contributions and Managerial Implications

5.3.1 Theoretical Contributions

First, this study contributes to the growing body of research into creativity and its dark side by highlighting the link between employee creativity and counterproductive work behaviours, which influence job performance. Notably, studies have been conducted into the negative side of employee creativity but none of these have addressed the factors that affect it and its unintended impact on employee performance and organizational productivity. The study, therefore, responds to calls for research on the need to determine if there are negative, unintended consequences of creativity that offset any possible benefits (Shalley, Zhou & Oldham, 2004) as few studies have directly examined this possibility. Consequently, this

study theoretically provides insight into why the antecedents of employee creativity might provide conditions under which employee creativity enhances or hinders CWB.

The findings confirm that while some positive antecedents of employee creativity are also positive moderators of the relationship between employee creativity and CWB, other positive antecedents of employee creativity are also negative moderators of the relationship between employee creativity and CWB. Similarly, some negative antecedents of employee creativity are also negative moderators of the relationship between employee creativity while some negative antecedents of employee creativity that are positive are also moderators of the relationship between employee creativity and counterproductive work behaviour. Thus, the study gives more empirical meaning to research on the dark side of employee creativity on the back of the effect of contextual and personal factors on employee creativity consistent with earlier studies (e.g. Oldham & Cummings, 1996; Shalley, Zhou & Oldham, 2004; Tsai et al., 2015).

The main contribution of this study is the model, which presents a reasonable theoretical foundation that gives insight into the interaction between individual employee characteristics, their work environment, and critical resources such as creativity and its relationship with negative work behaviours. This is very important for theoretical advancement in studies on the relationship between human resource management and organizational behaviours necessary for every organization seeking to gain a competitive urge in the global world economy. Thus, the study highlights the reasoning that the effect of personal characteristics and supervisor factors on employee creativity might create conditions influencing work performance such that its benefits might be eroded. It also serves to broaden the current conceptualization of the dark side of employee creativity as it examines the interaction of the factors affecting employee creativity on one hand and its dark side on the other to create conditions that affect performance. The theoretical bases underlying this study are Social Exchange Theory (SET), Transaction Cost Analysis (TCA), and Goal Orientation Theory (GOT). These theories have already been used in various ways to explain human and organizational behaviours.

In the study, Social Exchange Theory (SET) was adopted to explain the relationship between two personal characteristics (role identity and self-efficacy) and two supervisory factors (role ambiguity and transformational leadership) that influence the effect of employees' creativity

on CWB. It can be observed from the study that in line with SET, antecedents from personal characteristics and supervisory factors play an important role in promoting both employee creativity and counterproductive work behaviours. For example, the study recognizes that transformational leadership through SET by itself does not cause an increase in employee creativity unless there is a supportive climate or environment as has been proposed in previous studies (Jaiswal & Dhar, 2015; Wang, Tsai & Tsai, 2015). Furthermore, the findings of the study confirm SET as underpinning all these suggested relationships for these constructs except for role ambiguity.

Thus, theoretically, the study contributes further insight into SET which argues that individuals will, in a social context, enact behaviours that will ensure maximizing their self-interest in those situations (Wetzel et al., 2014; Zainol, Yasin, Omar & Hashin, 2014). This for instance is confirmed in the application of SET in explaining a role identity and self-efficacy, which the study findings reveal causes employees to enhance their creativity because it aligns with their self-interest characteristics. Such that once they are identified as having these characteristics in an organization, they will go all out to affirm it in their work performance behaviours. At the same time, such employees with these characteristics will abhor any enactment that deviates from what they envisage about themselves and is contrary to their self-interest. The study findings, therefore, affirm the relational interdependency of SET and its appropriateness in explaining such relationships.

In the same manner, GOT deepens insight into the relationships involving learning orientation providing more understanding that although it will increase employee creativity, it will rather hinder CWB when it is high rather than low. This is because a higher learning orientation will enable creative employees to focus on their goals to develop their competencies (Gong et al, 2013), as they always look for avenues to improve their work consistent with the concept of GOT. Relying on this same theory, the study found that contrary to arguments suggested, performance orientation will enhance employee creativity and moderate its effect to hinder CWB. Thus, demonstrating that although performance orientation may lower employees' perception of their enabling work situation thereby reducing their organizational commitment, they will still increase their creativity and not engage in CWBs. Similarly, achievement orientation under GOT presented the same results as transformational leadership in its relationship with employee creativity and moderating effect on CWB. Achievement orientation provides an avenue for employees to seek ability

assessment and performance feedback which motivates them to seek to attain high levels of distinction and enable them to meet set targets (Yi & Wang, 2015). However, the findings pointed out that achievement orientation does not drive employees to be creative and also rather causes them to exhibit counterproductive work behaviours. This is important for determining employee creative work behaviours and their effect on organizational development and productivity thereby contributing to knowledge in this field.

Consequently, consistent with the basic arguments underpinning GOT, the study findings prove that employees' goal orientation is related to their task performance. Thus, the findings contribute theoretically to GOT and emphasize the argument that individuals determine, interpret and respond to situations based on their self-belief which inclines them to pursue specific goals when undertaking a certain job function (Zhang et al., 2018). This is particularly seen in the relationship between learning and performance orientations and their effect on employee creativity as GOT causes such employees to endeavour to perform their tasks by their orientations. Furthermore, the findings theoretically add to GOT by revealing that under some circumstances GOT may not always be favourable to organizational performance as employees may use their goal orientation whilst engaging in creativity to also indulge in CWBs. This is because although goal orientation will cause employees to increase their competencies, develop their capabilities (learning orientation), and outperform their co-workers (performance orientation) to achieve much for their organization, the study found this is based on some situational factors. Such situational factors include rewards, evaluation focus, guidance, and assigned goals, and managing the attention and efforts of employees (Bunderson & Sutcliffe, 2003; Zhang et al., 2018). In effect, these conditions provide support for this theory for the full benefits of employees exercising their goal orientation characteristics to achieve the desired effect.

TCA relates to the cost and benefits obtained in retaining control in a particular situation in an organization (Erramilli & Rao, 1993) and it is important to weigh these controls against each other to achieve the most efficient system. The study identified two types of controls, process and output controls and through TCA found that each control mechanism affects performance based on who bears the performance risks. The study found that while process control shifts performance risk to the supervisor, it hinders creativity and enhances its effect on CWB which is detrimental to an organization. On the other hand, output control which places the performance risk on the employee does not encourage employee creativity but

rather hinders its effect on CWB, and therefore, both its benefits and cost to an organization in terms of this relationship even out. This, therefore, shows that the opportunistic behaviour associated with TCA is greater under process control rather than output control. Hence, the study contributes to the TCA by indicating that even though all controls affect performance through the effect of employee creativity on CWB, its influence is more overwhelming under process control. Consequently, the findings extend TCA in that its effect is most felt in exchange relationships through opportunistic behaviour depending on the point at which it is being exercised and who bears the risk of performance. This insight is important in applying controls to derive maximum benefits for organizational progress when creativity is necessary.

Lastly, the methodology adopted through the use of the quantitative approach using a survey in the data collection minimized much of the common method bias that is likely to be associated with research in behavioural science. The study was careful to ensure that employee questionnaires and supervisor questionnaires were matched and efforts were made to obtain objective ratings from the supervisors to make certain the reliability and validity of the data. This methodology and approach will possibly contribute to research design adaptation in future studies in behavioural science and organizational behaviours.

5.3.2 Managerial Implications

The study findings have several implications for managers seeking to promote employee creativity to remain relevant and competitive in Ghana. Prior research has identified several variables that significantly promote or inhibit creative performance and has argued for the importance of enhancing these factors with the primary goal of increasing creativity (Gino & Ariely, 2012, Vincent & Kouchaki, 2015). However, the findings of the study reveal that stimulating employee creativity may be good only based on some conditions as discussed earlier as its antecedents may cause potential situations that may lead to counterproductive work behaviour, which will hurt organizational performance. Therefore, while creativity undoubtedly can have significant benefits, organizations that encourage creativity may unintentionally encourage employees to engage in CWB creating a paradox. The study, therefore, enlightens managers to this paradox so that in stimulating employee creativity they must be aware of the effect of the personal characteristics of their employees and required

work environment and conditions which will increase creativity and hinder CWB. Consequently, they can tailor the necessary regulations, training, and programs to ensure they carefully manage their creative employees to enable their organization to achieve its maximum benefits to have the desired effects. This is because managers may be promoting employee creativity while unconsciously increasing employee counterproductive work behaviours detrimental to the growth of their organization.

Consequently, the four categorized conditions from the findings of the study provide a base for several valuable insights on how managers can strategically manage the antecedents of employee creativity to harness performance and productivity while hindering any ensuing counterproductive work behaviours. For instance, the study suggests that personal characteristics such as role identity, self-efficacy, and performance orientation are factors that promote creativity and also hinder CWB. Thus, stimulating creativity in employees possessing this character is good for the organization as such employees bring much benefit with their creativity, which leads to high productivity. This is consistent with earlier studies which indicated that an employee's role identity increases his ability to achieve creative results in the satisfaction of his or her self-views while forgoing behaviours that will cause a deviation from such self-views (Erkutlu & Chafra, 2015; Farmer, Tierney & Kung-McIntyre, 2003). This insight is important for managers as under this condition, promoting employee creativity will be beneficial to their organizations and should, therefore, encourage it.

Similarly, the study findings confirmed from the literature that employees with high self-efficacy have intrinsic motivation and the capacity to be creative (Tierney & Farmer, 2011) which managers to increase performance must tap into. Again, they also will not engage in CWBs because their self-efficacy increases their involvement at work because of their competency to perform their task well to prove themselves. Thus, managers stimulating creativity in employees with this characteristic are likely to achieve the desired effect in their organization. In the case of performance orientation, the findings indicated from the study that employees with this characteristic will enhance creativity and hinder CWB means managers can harness this trait to improve their work performance. This is because employees with particular characteristics have a desire to prove their capability to be creative and achieve results. This will then increase their productivity; hence promoting creativity in such employees will benefit their organization as performance is increased.

Notably, under the conditions whereby the factors that enhance employee creativity also enhance CWBs, managers must be careful when stimulating creativity in these circumstances. The factors under this condition include role ambiguity and learning orientation. Although the study found these factors increase employee creativity, it also found that they can erode the gains made through such creativity by their counterproductive work behaviours. Thus, even though on the face of it they may seem to be contributing much to productivity, it may not be the case. Their creativity causes them to engage in CWBs according to the findings of the study thus, eroding whatever benefits they may have contributed eventually. Managers must, therefore, be able to put in place adequate monitoring structures to ensure that, CWB is minimized when seeking to enhance their creativity to see the desired effect of their creativity in the organization.

Considering factors that hinder employee creativity and enhance CWB, it is clear, it is a situation a manager should carefully avoid when handling such employees. These factors which include transformational leadership, achievement orientation, and process control when found in an environment where creativity is valued, do not increase productivity. Employees under this condition while not contributing to creativity will still engage in CWBs. Therefore, the manager must be cautious about where to place such employees in their production line if they would want to see their organizations perform well. For example, in the case of process control, the study establishes that where managers provide strict process guidelines, they ought to know that they are stifling creativity, which also encourages CWB as employees to engage in opportunistic behaviours that are detrimental to their organization. Earlier studies have also suggested that an intense controlling supervisory style will discourage out-of-the-box thinking, leading to satisfaction with the current status which will constrain creativity (Erkutlu & Chafra, 2015; Oldham & Cummings, 1996). Consequently, administering process control in such a creative environment must be carefully thought through so as not to defeat its purpose and hurt the organization.

Similarly, even though transformational leadership has been identified by some previous studies as a key factor in encouraging and supporting employee creativity (Shin & Zhou, 2003; Wang, Tsai &Tsai, 2015) the study finds that in a creative environment, it doesn't enhance employee creativity but enhances CWBs. This is critical for managers to know so that in exercising this type of leadership when creativity is required, it may yield the necessary benefits desired. As such, it must be noted that under this condition, the paradox

of the effect of these particular antecedents of employee creativity on CWB is evident and made known to practically guide managers on how to manage employee creativity.

Lastly, is the condition under which factors that hinder employee creativity also hinder CWB. The only factor falling in this category in the study is output control. While the study confirms past studies through its findings that because output control shifts the burden of compliance and delivery of targets to supervisors (Atuahene-Gima & Li, 2002), in a creative environment, this does not encourage employee creativity therefore managers must be cautious in implementing such a system. Similarly, as output control does not encourage opportunistic behaviour under this condition, creative employees will not engage in CWBs. Thus, the study reasons that managers should know that the use of this type of control in their creative work environment will likely cause their employees to be mediocre in their work delivery and performance. It will be therefore important to balance the use of this control with other measures if they aim to motivate such employees to perform exceptionally in their organization.

In conclusion, these are practical indicators managers need to know to be able to determine when creativity matters in their organization if they aim to achieve the desired effect so they do not unknowingly promote the adverse effects of CWBs. Furthermore, knowledge about employees' characteristics is important and it will help managers know where promoting creativity is desirable and will be effective to yield the maximum benefits. Again, the type of supervision required in a creative environment is highlighted in the study. This will also serve as a useful guide when managers are formulating and planning activities involving supervisors and employees where creativity is required to ensure their organization gains a competitive edge and remain relevant in the global economy.

5.4 Limitations of the Study and Direction for Further Studies

This study presents empirical evidence that grants further insight into the dark side of employee creativity as purported by prior studies and adds significantly to knowledge on the relationships between the antecedents of employee creativity and counterproductive work behaviour. Nonetheless, the result of this study should be interpreted within its limitations, and contributions made should be qualified in light of several important limitations of the

study, which future research can address. The limitations and their respective suggestions for future studies that characterized the study are discussed below.

First, the study collected data from the advertising industry which already has creativity-oriented employees thus, it was easy for supervisors to confirm the creativity of their subordinates. This may have tilted the research into a highly creative demand context where competition among employees may make it easy to exercise creativity and difficult to engage in acts that will hinder their performance. This is attested to by the result of the study which showed a generally high level of creativity and low CWB among the respondents. It is also important to note that some elements of self-desirability and leniency biases may have affected the responses to the questionnaire as supervisors had to validate the creativity of the employees. This may have happened despite the measure taken to forestall this occurrence because the supervisors had access to the responses of the employee before undertaking their ratings. Thus, future studies using a less creative environment may yield different results. Future research may therefore also consider conducting this same research in other industries where creativity is not highly demanded and creative employees may feel more entitled among their not-so-creative co-workers. Furthermore, it must be noted that prior studies have focused on the antecedents of employee creative and job performance mostly done in other industries such as tourism (Tsai et al., 2015; Jaiswal & Dhar, 2015), technology (Gong, Zhou & Chang, 2013; Mittal & Dhar, 2015) and marketing (Hur, Moon & Rhee, 2016). Hence, further studies on the relationship between employee creativity and CWBs in these industries will add more to knowledge in this domain.

Another limitation of the study relates to the source of the data. Data were collected only from Private Sector organizations that are most competitive and profit-orientated and where performance monitoring and evaluation may be higher and therefore opportunities for employees to engage in counterproductive work behaviours were minimal, unlike the Public Sector. Hence, it is recommended that future research should be conducted with a focus in the Public Sector where CWB may be pervasive to see the level to which these relationships will occur and if the findings will vary greatly from this study. Moreover, the study could not consider all the personal characteristics and supervisor factors likely to have an effect on employee creativity to influence CWB. Therefore, future studies should include and explore other personal and contextual factors in the model to advance studies to broaden and identify other conditions managers should recognize in determining when employee creativity

matters in an organization. Then again, the limited time available within which the study was conducted could not allow for an intensive study into each moderating antecedent. More so, it could not also consider an integrated moderation of the antecedents on the relationship between employee creativity and counterproductive work behaviours. Rather the moderating effect of each antecedent was examined separately. Future studies should look at how these antecedents, when integrated, will differently moderate the relationship between employee creativity and counterproductive work behaviours. Furthermore, the study recommends that future studies investigate more, the relationship between employee creativity and CWB to provide clarity on its effect on organizational behaviours and employee performance.

Moreover, the study's findings indicate that while some antecedents affect employee creativity either positively or negatively due to some underlying conditions, other constructs also moderate the effect of employee creativity on CWB positively or negatively as a result of some conditions. For instance, transformational leadership requires conditions of a conducive work environment, task, and follower characteristics for a positive effect on employee creativity. Similarly, performance orientation requires conditions of rewards, evaluation focus, guidance, and assigned goals, and managing attention in their effect on employee creativity and as moderators on the relationship between employee creativity and CWB. In addition to all that, learning orientation requires decentralized and less formalized systems to hinder CWBs. These different settings, which have not been examined in this study's conceptual framework but greatly influence the conditions that arise from the relationships provide a new direction for further studies to advance research in this domain. In terms of methodology, the study adopted a quantitative approach through which means data was collected through a survey. Although the research was designed to ensure that questionnaire for the employees was rated independently and then corresponded with their supervisor's ratings, future studies can still improve upon the collection of this type of data without compromising objectivity. Again, due to the difficult nature of collecting behavioural data in such social studies, future research may also consider adopting a mixed-method whereby qualitative data can be collected to corroborate the survey responses.

5.5 Chapter Summary

In conclusion, it appears this study is one of the few examining the effects of the antecedents of employee creativity and their contingent moderating effect on the relationship between employee creativity and counterproductive work behaviour in organizations. The study findings point out two key issues: 1) that not all personal characteristic and supervisor factors lead to an increase in employee creativity and 2) the antecedents of employee creativity moderates the relationship between employee creativity and counterproductive work behaviour such that not all lead to counterproductive work behaviour hindering performance. Consequently, the study recommends that employee creativity must be managed within organizations giving particular attention to the potential trade-off effects of its antecedents. It is hoped that this study will generate more research and discussions on the negative side of employee creativity considering the important role it plays in giving organizations a competitive edge in the global world economy.

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APPENDIX 3A

Questionnaires

Employees

I am Theodora M. Mends, a Ph.D. student of Nobel International Business School in Accra Ghana conducting research for my Ph.D. thesis.

Purpose of Research and Caveats

You have been selected among a sample of employees to participate in the data collection for this research study. Your participation despite this selection is completely voluntary and you don't have to participate if you don't want to.

The data collected is confidential and will be used for only academic purposes. It will also not be used against you and you are free to refuse to answer this questionnaire. Please tick your responses within the spaces provided under the ranges by the questions which will take 15 minutes. Thank you for taking time off to answer these questionnaires.

Please indicate the extent to which the following statements apply to you at your workplace.					
SECTION A					
	No extent	<<<<<<<<<<<<<<<<<<			**To a large extent**
Statement	**1**	**2**	**3**	**4**	**5**
1. You come up with new ways and practical ideas to improve performance.					
2. You search out new technologies, processes, techniques, and/or product ideas.					
3. You suggest new ways to increase quality.					
4. You are a good source of creative ideas?					
5. You are not afraid to take risks.					
6. You promote and champion ideas to others.					
7. You exhibit creativity on the job when given the opportunity					
8. You develop adequate plans and schedules for the implementation of new ideas.					
9. You often have new and innovative ideas.					
10. You come up with creative solutions to problems.					
11. You often have a fresh approach to problems.					
12. You suggest new ways of performing work tasks.					
13. You suggest new ways to achieve goals or objectives					
SECTION B					
	No extent	<<<<<<<<<<<<<<<<<<			**To a large extent**
Statement	**1**	**2**	**3**	**4**	**5**
1. Keep tough problems from getting you down					
2. Bounce back after you tried your best and failed					
3. Get yourself to keep trying when things are going really bad					
4. Keep your spirit when you suffer hardship					

5. Get rid of self-doubts after you have tough setbacks					
6. Keep from being easily rattled					
7. Overcome discouragement when nothing you try seems to work					
SECTION C					
Please indicate your degree of agreement to each of the following statements below.					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			**Strongly agree**
Statement	**1**	**2**	**3**	**4**	**5**
1. It is difficult to tell a supervisor or co-worker I cannot help					
2. It is my responsibility to be helpful to my supervisor and co-workers					
3. Colleagues generally turn to me when they have problems					
4. I characterize myself as a rescuer					
SECTION D					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			**Strongly agree**
Statement	**1**	**2**	**3**	**4**	**5**
1. I often read materials related to my work to improve my ability					
2. I am willing to select a challenging work assignment that I can learn a lot from					
3. I often look for opportunities to develop new skills and knowledge					
4. I enjoy challenging and difficult tasks at work where I'll learn new skills					
5. For me, the development of my workability is important enough to take risks					
6. I prefer to work in situations that require a high level of ability and talent					
SECTION E					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			**Strongly agree**
Statement	**1**	**2**	**3**	**4**	**5**

1. I would rather prove my ability on a task that I can do well at than to try a new task					
2. I am concerned with showing that I can perform better than my co-workers.					
3. I try to figure out what it takes to prove my ability to others at work					
4. I enjoy it when others at work are aware of how well am doing					
5. I prefer to work on projects where I can prove my ability to others					
SECTION F					
Please indicate your degree of agreement to each of the following statements below.					
	Very false	<<<<<<<<<<<<<<<<<<			**Very true**
Statement	**1**	**2**	**3**	**4**	**5**
1. I have to do things that should be done differently					
2. I lack policies and guidelines to help me					
3. I work under incompatible policies and guidelines					
4. I have to "feel my way" in performing my duties					
5. I am uncertain how my work is linked					
6. I have to work under vague directives and orders					
7. I do not know if my work will be acceptable to my boss					
SECTION G					
Please indicate your degree of agreement to each of the following statements below.					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
1. My pay increases and other tangible rewards depend on how well I follow work procedures.					
2. My pay increases and other tangible rewards depend on my knowledge of work procedures.					
3. My immediate supervisor monitors the extent to which I follow established procedures					

4. My immediate supervisor evaluates procedures I use to accomplish the task of working					
5. My immediate supervisor modifies the procedures if desired results are not obtained					
6. Primary weight in evaluating employees' performance is placed on work behaviour.					
7. Employees are accountable for their actions in work performance regardless of the results they achieve					
8. I receive feedback on how I accomplish my goals.					
SECTION H					
	Strongly disagree	<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
1. My salary increases and other benefits depend on how my performance meets my goals					
2. I will always have to explain why my performance goals are not met					
3. Performance evaluations of employees place primary emphasis on results					
4. My pay increases and other benefits depend on the degree to which I achieve specific goals					
5. My direct supervisor monitors the extent to which I achieve my performance goals					
6. I receive feedback from my direct supervisor on the extent to which I achieve my performance goals					
7. My job has specific performance goals					
SECTION I					
	Strongly disagree	<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
1. My supervisor expresses his/her confidence that we will achieve our goals					
2. My supervisor has a strong purpose					

3. My supervisor articulates a compelling vision of the future					
4. My supervisor talks optimistically about the future					
5. My supervisor seeks differing perspectives when solving problems					
6. My supervisor re-examines critical assumptions, whether they are appropriate					
7. My supervisor got me to look at the task from many different angles					
8. My supervisor spends time teaching and coaching me					
9. My supervisor suggests new ways of doing work					
10. My supervisor helps group members to develop their strengths					
SECTION J					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
1. My supervisor shows that he/she has confidence in my ability to meet most objectives					
2. My supervisor lets me know he/she expects me to perform at my highest level.					
3. My supervisor consistently sets challenging goals for me to attain					
4. My supervisor encourages continual improvement in my performance					
SECTION K					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
My organization provides rewards for skilled employees commensurate with their performance.					
My organization provides bonuses for workers according to their post and consistent with their level of performance					
My organization provides overtime payments to employees after working hours.					

My organization provides financial incentives to employees when they work professionally.					
My organization ensures appropriate social security and health insurance for employees.					
My organization provides appropriate offices and well-furnished ones for employees.					
Employees are promoted when they earn academic qualifications or training					
SECTION L					
	Strongly disagree	<<<<<<<<<<<<<<<<<<			***Strongly agree***
Statement	**1**	**2**	**3**	**4**	**5**
1. My tasks are extraordinary and particularly difficult					
2. I often have to make very complicated decisions in my work.					
3. I use all my knowledge and skills in my work.					
4. I learn new things in my work.					
SECTION M					
Please indicate the extent to which you will engage in the following behaviours in your workplace.					
	No extent	<<<<<<<<<<<<<<<<<<			**To a large extent**
Statement	**1**	**2**	**3**	**4**	**5**
1. Conduct personal business during work time					
2. Absent yourself from work without permission					
3. Intentionally do slow or sloppy work					
4. Use sick leave when not really sick					
5. Leave work early without permission					
6. Play computer games during work time					
7. Disobey supervisor's instructions					
8. Lie to employer or supervisor to cover up a mistake					

9. Wastes company materials intentionally					
10. Discuss confidential matters with unauthorized personnel within or outside the organization					
11. Spend time on the internet for reasons not related to work					
12. Take cash and property belonging to the company					

SECTION N

1. Sex: [ ] Male [ ] Female

2. Age: [ ] 20 - 30 [ ] 30 - 40 [ ] 40 - 50 [ ] 50 - 60

3. Level of Education

[ ] Master's degree [ ] Bachelor's degree [ ] Higher National Diploma

[ ] Diploma [ ] Senior High School [ ] Others (please specify) ……

4. Grade or level: [ ] Supervisor [ ] Senior staff [ ] Junior staff

5. Number of years of worked with Organization (Work experience):

[ ] 1 – 5 [ ] 6 – 10 [ ] 11 – 15 [ ] 16 – 20 [ ] Above 20

6. Position in the organization [ ] Supervisor [ ] Subordinate

SECTION O

1. What is the industry of your organization?

…….

2. What type of service/product do you provide in your organization?

…….……

3. What is the size of your organization?

[ ] Less than 50 [ ] 51 – 100 [ ] 100- 150 [ ] More than 150

4. What is the level of competition in the market that you service?

[ ] High [ ] Medium [ ] Low

NOTE PLEASE*:* *SUPERVISOR TO FILL FOR EACH RESPONDENT SUBORDINATE*

I am Theodora M. Mends, a Ph.D. student of Nobel International Business School in Accra Ghana conducting research for my Ph.D. thesis.

Purpose of Research and Caveats

You have been selected among a sample of employees to participate in the data collection for this research study. Your participation despite this selection is completely voluntary and you don't have to participate if you don't want to.

The data collected is confidential and will be used for only academic purposes. It will also not be used against you and you are free to refuse to answer this questionnaire. Please tick your responses within the spaces provided under the ranges by the statements which will take 15 minutes. Thank you for taking time off to answer these questionnaires.

SECTION A

Please answer these statements relating to your subordinate…….

	Not at all characteristics	<<<<<<<<<<<<<<<<			**Very characteristics**
Statement	**1**	**2**	**3**	**4**	**5**
12. Comes up with new ways and practical ideas to improve performance.					
13. Searches out new technologies, processes, techniques, and/or product ideas.					
14. Suggests new ways to increase quality.					
15. Is it a good source of creative ideas?					
16. Is not afraid to take risks.					
17. Promotes and champions ideas to others.					
18. Exhibits creativity on the job when given the opportunity					
19. Develops adequate plans and schedules for the implementation of new ideas.					
20. Often has new and innovative ideas.					
21. Comes up with creative solutions to problems.					
22. Often has a fresh approach to problems.					
23. Suggest new ways of performing work tasks.					

SECTION B

Please indicate the extent to which you will rate this employee according to these behaviours in your workplace.

	No extent	<<<<<<<<<<<<<<<<<<			**To a large extent**
Statement	**1**	**2**	**3**	**4**	**5**
13. Conduct personal business during work time					

14. Absent him/herself from work without permission					
15. Intentionally do slow or sloppy work					
16. Use sick leave when not really sick					
17. Leave work early without permission					
18. Play computer games during work time					
19. Disobey supervisor's instructions					
20. Lie to employer or supervisor to cover up a mistake					
21. Wastes company materials intentionally					
22. Discuss confidential matters with unauthorized personnel within or outside the organization					
23. Spend time on the internet for reasons not related to work					
24. Take cash and property belonging to the company					

SECTION C

5. What is the industry of your organization? ……

6. What type of service/product do you provide in your organization?…….…….

APPENDIX 3B

Items Cross loadings Matrices (Revised & Original)

	Age	Achievement orientation	Counter Productive Work Behaviour	Employee Creativity	Education	Experience	Position	Job complexity	Learning orientation	Output Control	Process Control	Performance orientation	Role Ambiguity	Role identity	Self-Efficacy	Gender	Transformational leadership	Work incentives
age	1.000	-0.049	0.017	0.001	-0.045	-0.157	0.032	0.172	-0.067	-0.132	-0.101	-0.165	-0.126	0.182	-0.100	-0.199	-0.204	-0.011
ao1	-0.038	0.810	-0.278	0.153	0.005	-0.121	-0.012	-0.008	0.089	0.012	0.303	0.116	0.149	0.006	0.295	0.100	0.581	0.322
ao3	-0.028	0.929	-0.457	0.183	0.000	-0.133	0.166	0.053	0.044	-0.069	0.361	0.186	-0.107	0.067	0.274	0.123	0.552	0.384
ao4	-0.065	0.848	-0.359	0.167	-0.047	-0.318	0.078	0.125	-0.055	0.009	0.261	0.074	-0.300	-0.241	0.290	-0.071	0.584	0.245
cwb3	0.273	-0.307	0.632	-0.352	-0.125	0.059	-0.075	-0.067	-0.452	-0.070	-0.188	-0.323	-0.063	-0.200	-0.418	-0.094	-0.479	0.082
cwb5	-0.016	-0.311	0.866	-0.450	-0.133	0.394	-0.078	-0.067	-0.378	-0.065	-0.178	-0.187	-0.057	-0.291	-0.323	0.096	-0.293	0.078
cwb6	-0.007	-0.309	0.918	-0.470	0.088	0.395	-0.061	-0.053	-0.493	-0.053	-0.271	-0.255	0.438	-0.249	-0.548	0.153	-0.409	0.207
cwb7	0.045	-0.402	0.829	-0.401	-0.073	0.419	-0.083	-0.005	-0.290	-0.076	-0.224	-0.096	-0.056	-0.119	-0.363	0.094	-0.436	-0.051
cwb8	-0.030	-0.340	0.784	-0.472	0.095	0.465	0.060	-0.061	-0.270	-0.071	-0.241	-0.184	0.338	-0.146	-0.379	0.048	-0.434	0.069
cwb9	0.003	-0.383	0.871	-0.412	-0.079	0.553	-0.063	-0.057	-0.303	-0.058	-0.206	-0.144	-0.039	-0.180	-0.486	0.101	-0.378	-0.047
cwb10	-0.005	-0.368	0.788	-0.398	-0.075	0.227	0.006	-0.086	-0.447	0.067	-0.163	-0.292	0.234	-0.352	-0.483	0.087	-0.418	0.172
cwb11	-0.090	-0.482	0.731	-0.523	-0.066	0.261	-0.121	-0.111	-0.482	-0.093	-0.249	-0.166	-0.090	-0.444	-0.460	-0.140	-0.275	-0.080

cwb12	0.023	-0.331	0.940	-0.449	0.017	0.410	-0.071	-0.060	-0.510	-0.061	-0.256	-0.255	0.288	-0.193	-0.517	0.091	-0.449	0.124
ec1	-0.115	0.225	-0.532	0.855	0.056	-0.463	-0.073	0.059	0.504	-0.112	0.012	0.107	0.029	0.104	0.531	-0.020	0.301	-0.151
ec2	-0.075	0.107	-0.278	0.676	0.023	-0.390	-0.173	0.061	0.448	-0.122	0.012	0.171	0.048	0.226	0.471	-0.321	0.173	0.012
ec3	0.024	0.202	-0.387	0.743	-0.084	-0.283	-0.093	-0.103	0.384	-0.278	-0.022	0.035	-0.127	0.259	0.384	0.030	0.096	-0.233
ec9	0.096	0.032	-0.273	0.740	0.174	-0.304	-0.080	0.222	0.262	-0.132	-0.118	0.164	0.043	0.292	0.436	-0.176	0.119	-0.190
ec11	0.025	0.115	-0.367	0.760	0.049	-0.285	-0.189	0.200	0.241	0.037	0.141	0.118	-0.269	0.229	0.230	-0.180	0.189	-0.136
ec12	-0.012	0.129	-0.179	0.655	0.027	-0.344	-0.044	0.070	0.019	-0.234	0.085	0.030	0.061	0.161	0.319	-0.151	0.086	-0.063
ec13	0.074	0.152	-0.545	0.809	0.180	-0.276	-0.056	0.236	0.490	-0.110	0.082	0.316	0.061	0.523	0.453	0.053	0.231	-0.214
edu	-0.045	-0.016	-0.042	0.087	1.000	0.226	-0.164	0.370	-0.086	-0.020	0.113	0.485	0.383	0.028	-0.163	-0.152	0.202	0.385
experience	-0.157	-0.219	0.438	-0.438	0.226	1.000	-0.042	-0.022	-0.056	-0.029	0.061	0.121	-0.023	0.126	-0.354	0.233	-0.145	0.041
grade	0.032	0.105	-0.065	-0.128	-0.164	-0.042	1.000	-0.039	0.004	-0.037	-0.082	-0.256	-0.033	0.026	0.175	0.242	-0.157	-0.037
jc1	0.159	0.078	-0.055	0.132	0.381	-0.013	-0.053	0.997	0.032	-0.025	0.193	0.222	0.019	0.146	0.241	-0.155	0.050	0.230
jc3	0.191	0.066	-0.090	0.156	0.362	-0.031	-0.041	0.999	0.074	-0.012	0.202	0.226	0.000	0.179	0.251	-0.133	0.046	0.221
jc4	0.157	0.070	-0.077	0.137	0.369	-0.017	-0.026	0.998	0.055	-0.017	0.214	0.216	0.004	0.155	0.239	-0.122	0.056	0.245

lo1	-0.001	0.044	-0.389	0.278	-0.066	0.021	0.020	-0.116	0.751	0.021	0.039	0.020	0.008	0.249	0.192	-0.083	0.174	-0.256
lo2	-0.124	-0.076	-0.288	0.356	-0.056	-0.009	-0.002	0.012	0.783	0.159	0.204	0.013	-0.012	0.337	0.392	0.005	0.197	-0.159
lo3	-0.100	-0.079	-0.378	0.397	-0.148	-0.035	-0.043	0.160	0.817	0.136	0.074	0.110	-0.182	0.307	0.377	-0.160	0.143	-0.372
lo4	0.000	0.020	-0.231	0.355	-0.228	0.002	-0.007	0.021	0.762	0.012	0.154	-0.135	0.002	0.219	0.388	0.045	0.067	-0.318
lo5	-0.078	-0.008	-0.438	0.508	0.082	-0.044	0.075	0.170	0.796	-0.186	0.027	0.325	-0.013	0.354	0.481	-0.046	0.258	-0.411
lo6	-0.018	0.164	-0.484	0.401	-0.072	-0.148	-0.031	0.002	0.806	0.153	0.062	0.112	-0.021	0.272	0.442	-0.030	0.285	-0.279
oc4	-0.132	-0.038	-0.053	-0.159	-0.026	-0.023	-0.025	-0.017	0.061	0.998	0.084	-0.139	-0.021	-0.127	-0.008	0.145	0.003	0.006
oc5	-0.127	-0.017	-0.070	-0.159	-0.018	-0.029	-0.039	-0.012	0.062	0.999	0.104	-0.125	-0.036	-0.133	-0.015	0.148	0.026	0.001
oc6	-0.144	-0.022	-0.067	-0.173	-0.023	-0.030	-0.039	-0.024	0.057	0.999	0.102	-0.141	-0.027	-0.134	-0.013	0.147	0.025	0.008
oc7	-0.123	-0.031	-0.060	-0.168	-0.014	-0.032	-0.042	-0.015	0.052	0.998	0.054	-0.126	-0.027	-0.121	-0.005	0.140	0.012	-0.015
pc1	0.101	0.292	-0.182	-0.005	0.231	0.117	-0.130	0.190	0.050	-0.014	0.670	0.258	-0.136	0.089	0.029	-0.083	0.236	0.429

pc3	0.002	0.381	-0.142	-0.077	0.006	0.121	-0.054	0.186	0.055	0.230	0.816	0.073	-0.271	-0.101	0.128	-0.052	0.390	0.337
pc4	-0.063	0.306	-0.084	-0.059	0.149	0.173	-0.008	0.114	0.028	0.044	0.760	0.104	-0.241	-0.150	-0.087	-0.204	0.230	0.328
pc5	-0.130	0.252	-0.060	-0.021	0.044	0.058	-0.028	0.092	0.089	0.132	0.676	0.068	-0.153	-0.043	0.078	-0.034	0.278	0.312
pc6	-0.050	0.300	-0.215	0.159	0.179	-0.013	-0.113	0.242	0.103	-0.093	0.787	0.208	-0.020	0.126	0.089	-0.167	0.362	0.487
pc7	-0.233	0.228	-0.321	0.052	-0.021	-0.017	-0.022	0.107	0.109	0.149	0.883	0.070	-0.270	-0.082	0.179	-0.059	0.325	0.334
po1	0.002	0.187	-0.208	0.115	0.386	0.038	-0.054	0.235	0.090	-0.148	0.223	0.713	-0.010	0.098	0.053	-0.342	0.361	0.082
po2	-0.104	0.022	-0.084	0.108	0.434	0.232	-0.232	0.162	-0.116	-0.057	0.165	0.677	-0.139	0.052	0.030	0.144	0.202	0.187
po3	-0.177	0.177	-0.092	0.105	0.374	0.198	-0.179	0.154	-0.025	-0.239	0.297	0.675	0.035	0.014	0.060	0.092	0.197	0.257
po4	-0.212	0.052	-0.245	0.194	0.300	0.042	-0.291	0.107	0.210	-0.016	-0.031	0.801	-0.124	0.089	0.138	-0.023	0.245	-0.034
ra4	-0.140	-0.118	0.147	-0.036	0.385	-0.030	-0.039	-0.006	-0.059	-0.026	-0.229	-0.071	0.999	0.018	-0.123	0.143	-0.104	0.221
ra5	-0.110	-0.127	0.158	-0.028	0.393	-0.011	-0.037	0.023	-0.043	-0.028	-0.229	-0.083	0.999	0.043	-0.124	0.151	-0.111	0.221

ra7	-0.130	-0.116	0.142	-0.032	0.367	-0.030	-0.024	0.000	-0.043	-0.031	-0.234	-0.113	0.998	0.026	-0.130	0.158	-0.121	0.234
ri3	0.182	-0.057	-0.296	0.353	0.028	0.126	0.026	0.163	0.372	-0.129	-0.016	0.103	0.029	1.000	0.325	0.002	-0.093	-0.187
sel1	-0.227	0.131	-0.305	0.421	-0.204	-0.096	0.113	0.172	0.469	0.004	-0.041	0.050	0.005	0.185	0.741	0.209	0.062	-0.219
sel2	-0.184	0.282	-0.489	0.473	-0.195	-0.363	0.114	0.169	0.352	0.018	0.114	0.067	-0.250	0.054	0.841	-0.132	0.327	-0.184
sel3	-0.128	0.208	-0.385	0.299	-0.084	-0.158	0.166	0.209	0.304	-0.119	-0.002	0.214	-0.104	0.198	0.828	0.030	0.256	-0.081
sel4	-0.105	0.275	-0.435	0.418	-0.209	-0.278	0.133	0.158	0.269	0.035	0.172	0.170	-0.308	0.267	0.824	-0.015	0.276	-0.154
sel5	0.098	0.278	-0.348	0.449	-0.011	-0.320	0.133	0.257	0.430	-0.061	0.132	0.012	0.089	0.429	0.678	-0.173	0.207	0.017
sel7	0.050	0.310	-0.509	0.469	-0.062	-0.365	0.160	0.197	0.472	0.042	0.146	0.022	0.040	0.404	0.760	-0.013	0.303	-0.098
sex	-0.199	0.061	0.065	-0.102	-0.152	0.233	0.242	-0.135	-0.066	0.145	-0.121	-0.121	0.151	0.002	-0.032	1.000	-0.137	0.055

tl1	-0.059	0.339	-0.327	-0.031	0.160	-0.104	-0.282	-0.020	0.192	0.154	0.378	0.138	-0.145	-0.152	0.087	-0.173	0.688	0.116
tl2	-0.340	0.496	-0.463	0.209	0.258	-0.044	-0.140	0.120	0.345	0.143	0.359	0.389	-0.030	0.046	0.374	-0.153	0.862	0.143
tl3	-0.273	0.539	-0.472	0.266	0.120	-0.099	-0.097	-0.121	0.292	0.040	0.331	0.311	-0.140	-0.202	0.184	-0.064	0.865	0.144
tl4	-0.155	0.538	-0.479	0.360	0.098	-0.208	-0.207	0.142	0.299	0.168	0.403	0.349	-0.291	-0.066	0.399	-0.156	0.879	0.095
tl5	-0.146	0.580	-0.436	0.353	0.159	-0.145	-0.026	0.005	0.330	-0.152	0.211	0.379	-0.009	-0.049	0.403	-0.057	0.857	0.039
tl6	-0.202	0.335	-0.269	0.118	0.079	-0.036	-0.244	0.051	0.239	0.083	0.416	0.206	-0.108	-0.006	0.267	-0.170	0.692	0.155
tl8	0.006	0.580	-0.296	0.170	0.193	-0.139	-0.039	0.044	0.038	-0.077	0.222	0.345	0.032	0.104	0.234	0.065	0.765	0.367
tl9	-0.037	0.555	-0.213	-0.062	0.242	0.040	0.040	0.176	-0.097	-0.236	0.337	0.157	0.014	-0.119	0.025	-0.065	0.693	0.434
tl10	-0.071	0.564	-0.231	0.111	0.181	-0.274	-0.087	0.014	-0.213	-0.231	0.154	0.180	0.001	-0.282	0.090	-0.220	0.722	0.322

wi2	-0.032	0.314	0.065	-0.137	0.355	-0.023	-0.171	0.138	-0.238	-0.040	0.380	0.147	0.227	-0.215	-0.157	0.077	0.224	0.894
wi3	0.008	0.322	0.076	-0.105	0.356	0.097	-0.047	0.255	-0.355	-0.109	0.452	0.128	0.158	-0.155	-0.081	0.071	0.135	0.931
wi4	-0.007	0.362	0.071	-0.303	0.328	0.027	0.106	0.225	-0.443	0.152	0.467	0.008	0.229	-0.140	-0.184	0.002	0.231	0.873

	Counter Productive Work Behaviour	Employee Creativity	Achievement orientation	Age	Education	Experience	Gender	Job complexity	Learning orientation	Output Control	Performance orentation	Position	Process Control	Role Ambiguity	Role identity	Self-Efficacy	Transformational leadership	Work incentives
age	0.032	-0.005	-0.064	1.000	-0.045	-0.157	-0.199	0.179	-0.067	-0.156	-0.145	0.032	-0.097	-0.112	0.076	-0.109	-0.190	-0.047
ao1	-0.282	0.160	0.804	-0.038	0.005	-0.121	0.100	-0.007	0.087	0.114	0.136	-0.012	0.309	0.120	-0.048	0.282	0.586	0.030
ao2	-0.114	0.227	0.063	-0.127	0.232	-0.048	-0.125	-0.005	0.129	-0.136	0.287	-0.035	-0.275	0.014	0.207	0.217	0.150	-0.279
ao3	-0.442	0.204	0.908	-0.028	0.000	-0.133	0.123	0.052	0.041	0.246	0.192	0.166	0.361	-0.115	0.034	0.257	0.556	0.161
ao4	-0.325	0.174	0.860	-0.065	-0.047	-0.318	-0.071	0.124	-0.057	0.278	0.071	0.078	0.269	-0.323	-0.188	0.291	0.577	0.034
cwb1	0.544	-0.231	-0.197	0.107	-0.032	-0.131	-0.097	-0.105	-0.347	-0.085	-0.123	-0.125	-0.170	-0.115	-0.441	-0.410	-0.157	0.366
cwb10	0.791	-0.408	-0.378	-0.005	-0.075	0.227	0.087	-0.081	-0.444	-0.144	-0.298	0.006	-0.170	0.238	-0.370	-0.481	-0.420	0.269
cwb11	0.751	-0.528	-0.501	-0.090	-0.066	0.261	-0.140	-0.112	-0.479	-0.169	-0.173	-0.121	-0.260	-0.082	-0.444	-0.463	-0.284	0.250
cwb12	0.928	-0.437	-0.339	0.023	0.017	0.410	0.091	-0.063	-0.506	-0.305	-0.256	-0.071	-0.253	0.318	-0.209	-0.514	-0.445	0.172
cwb2	0.560	-0.271	0.000	0.133	0.148	-0.076	-0.131	-0.069	-0.659	-0.113	-0.141	-0.073	-0.055	-0.046	-0.423	-0.456	-0.181	0.325
cwb3	0.671	-0.356	-0.323	0.273	-0.125	0.059	-0.094	-0.067	-0.452	-0.205	-0.328	-0.075	-0.185	-0.045	-0.221	-0.419	-0.480	0.176
cwb4	-0.018	-0.005	0.057	0.187	0.086	-0.038	0.155	-0.017	0.032	-0.018	0.087	-0.024	-0.155	-0.017	-0.015	-0.196	-0.050	0.041
cwb5	0.862	-0.436	-0.324	-0.016	-0.133	0.394	0.096	-0.069	-0.372	-0.154	-0.187	-0.078	-0.182	-0.045	-0.304	-0.323	-0.292	0.294
cwb6	0.907	-0.460	-0.314	-0.007	0.088	0.395	0.153	-0.055	-0.490	-0.339	-0.254	-0.061	-0.268	0.450	-0.258	-0.544	-0.405	0.256
cwb7	0.812	-0.371	-0.416	0.045	-0.073	0.419	0.094	-0.011	-0.285	-0.163	-0.100	-0.083	-0.219	-0.017	-0.146	-0.360	-0.432	0.154
cwb8	0.751	-0.457	-0.345	-0.030	0.095	0.465	0.048	-0.063	-0.265	-0.307	-0.183	0.060	-0.233	0.363	-0.173	-0.376	-0.431	0.091
cwb9	0.844	-0.397	-0.391	0.003	-0.079	0.553	0.101	-0.055	-0.297	-0.240	-0.143	-0.063	-0.204	-0.033	-0.194	-0.481	-0.365	0.130
ec1	-0.533	0.858	0.247	-0.115	0.056	-0.463	-0.020	0.056	0.504	0.085	0.108	-0.073	0.024	0.010	0.090	0.539	0.290	-0.066
ec10	-0.053	0.046	0.061	0.193	0.078	-0.059	0.158	-0.011	0.074	-0.007	0.094	-0.031	-0.154	-0.022	0.007	-0.157	-0.029	0.022
ec11	-0.352	0.751	0.133	0.025	0.049	-0.285	-0.180	0.191	0.241	0.243	0.101	-0.189	0.140	-0.276	0.235	0.235	0.178	-0.087
ec12	-0.152	0.647	0.136	-0.012	0.027	-0.344	-0.151	0.060	0.021	-0.065	0.019	-0.044	0.065	0.070	0.106	0.313	0.072	0.028
ec13	-0.557	0.814	0.183	0.074	0.180	-0.276	0.053	0.228	0.487	0.020	0.322	-0.056	0.071	0.073	0.522	0.459	0.232	-0.238
ec2	-0.270	0.662	0.134	-0.075	0.023	-0.390	-0.321	0.055	0.447	-0.021	0.191	-0.173	0.022	0.056	0.210	0.479	0.177	-0.075
ec3	-0.399	0.749	0.221	0.024	-0.084	-0.283	0.030	-0.103	0.385	-0.093	0.016	-0.093	-0.004	-0.138	0.254	0.393	0.102	-0.167
ec4	0.061	0.171	-0.096	0.014	-0.265	-0.242	-0.082	0.042	0.108	-0.074	-0.244	-0.035	-0.252	-0.254	-0.131	0.199	-0.102	-0.209
ec5	0.016	0.243	-0.072	-0.029	-0.058	-0.084	-0.243	-0.131	0.051	-0.032	-0.145	-0.096	0.001	0.030	0.014	0.302	-0.019	-0.201
ec6	-0.073	0.547	-0.079	0.101	-0.124	-0.206	-0.077	0.027	0.210	-0.064	0.193	-0.221	0.040	-0.126	0.093	0.298	0.021	0.001
ec7	-0.106	0.308	0.186	-0.128	-0.058	-0.057	0.155	-0.004	-0.001	-0.150	0.305	-0.036	-0.240	-0.010	0.149	0.172	0.098	0.044
ec8	-0.166	0.590	0.198	-0.098	0.024	-0.113	0.068	0.090	0.249	-0.035	0.090	-0.017	0.197	-0.074	0.101	0.217	0.193	0.084
ec9	-0.257	0.709	0.059	0.096	0.174	-0.304	-0.176	0.213	0.261	-0.086	0.139	-0.080	-0.135	0.065	0.308	0.440	0.119	-0.011
edu	-0.030	0.085	0.014	-0.045	1.000	0.226	-0.152	0.360	-0.090	0.020	0.478	-0.164	0.118	0.391	0.200	-0.152	0.212	0.184
experienc	0.390	-0.419	-0.221	-0.157	0.226	1.000	0.233	-0.027	-0.054	-0.048	0.123	-0.042	0.063	-0.008	0.287	-0.348	-0.136	0.078
grade	-0.075	-0.128	0.100	0.032	-0.164	-0.042	0.242	-0.033	0.004	-0.112	-0.260	1.000	-0.086	-0.021	-0.011	0.172	-0.155	0.185
jc1	-0.061	0.127	0.077	0.159	0.381	-0.013	-0.155	0.995	0.033	0.062	0.217	-0.053	0.191	0.054	0.143	0.239	0.054	0.111
jc2	0.010	0.215	0.068	-0.151	0.300	0.120	-0.270	0.137	0.178	-0.042	0.466	-0.137	-0.024	0.082	0.338	0.073	0.048	-0.026
jc3	-0.098	0.153	0.064	0.191	0.362	-0.031	-0.133	0.998	0.075	0.074	0.223	-0.041	0.199	0.037	0.168	0.249	0.050	0.102
jc4	-0.084	0.136	0.068	0.157	0.369	-0.017	-0.122	0.998	0.055	0.083	0.213	-0.026	0.213	0.037	0.146	0.236	0.062	0.128

lo2	-0.313	0.334	-0.072	-0.124	-0.056	-0.009	0.005	0.010	0.783	0.247	0.030	-0.002	0.194	-0.008	0.310	0.390	0.204	-0.327
lo3	-0.426	0.375	-0.063	-0.100	-0.148	-0.035	-0.160	0.152	0.821	0.157	0.123	-0.043	0.064	-0.185	0.326	0.385	0.149	-0.416
lo4	-0.286	0.368	0.004	0.000	-0.228	0.002	0.045	0.024	0.770	0.083	-0.111	-0.007	0.144	-0.021	0.123	0.382	0.071	-0.319
lo5	-0.465	0.525	0.012	-0.078	0.082	-0.044	-0.046	0.161	0.795	-0.109	0.340	0.075	0.000	-0.018	0.375	0.486	0.264	-0.305
lo6	-0.500	0.390	0.188	-0.018	-0.072	-0.148	-0.030	-0.002	0.800	0.131	0.100	-0.031	0.060	-0.049	0.291	0.447	0.288	-0.420
oc1	-0.248	0.184	0.281	-0.107	0.233	-0.042	-0.187	0.132	0.070	0.559	0.170	-0.125	0.676	0.014	-0.049	0.130	0.385	0.160
oc2	0.113	-0.052	-0.090	-0.127	0.381	-0.032	0.154	0.007	-0.038	-0.268	-0.101	-0.026	-0.188	0.983	0.011	-0.119	-0.073	0.061
oc3	-0.070	0.141	0.200	-0.120	-0.028	-0.042	0.148	-0.009	0.047	0.235	-0.071	-0.037	0.011	-0.059	-0.007	0.163	0.216	0.199
oc4	-0.061	-0.188	-0.041	-0.132	-0.026	-0.023	0.145	-0.014	0.061	0.656	-0.142	-0.025	0.072	-0.036	-0.128	-0.008	0.000	-0.156
oc5	-0.076	-0.189	-0.021	-0.127	-0.018	-0.029	0.148	-0.009	0.062	0.655	-0.128	-0.039	0.090	-0.051	-0.136	-0.016	0.023	-0.169
oc6	-0.072	-0.203	-0.028	-0.144	-0.023	-0.030	0.147	-0.020	0.057	0.651	-0.144	-0.039	0.091	-0.041	-0.139	-0.015	0.022	-0.168
oc7	-0.066	-0.199	-0.032	-0.123	-0.014	-0.032	0.140	-0.012	0.052	0.636	-0.130	-0.042	0.042	-0.039	-0.118	-0.005	0.010	-0.186
pc1	-0.194	0.014	0.277	0.101	0.231	0.117	-0.083	0.192	0.050	0.372	0.245	-0.130	0.702	-0.117	0.073	0.021	0.242	0.054
pc2	-0.025	-0.033	0.221	0.198	0.298	0.176	-0.117	0.163	-0.063	0.262	0.190	-0.047	0.562	-0.105	0.088	-0.186	0.074	0.070
pc3	-0.141	-0.073	0.352	0.002	0.006	0.121	-0.052	0.191	0.058	0.598	0.105	-0.054	0.817	-0.259	-0.150	0.111	0.386	-0.030
pc4	-0.071	-0.062	0.275	-0.063	0.149	0.173	-0.204	0.110	0.030	0.512	0.114	-0.008	0.728	-0.260	-0.151	-0.102	0.227	0.028
pc5	-0.046	-0.029	0.223	-0.130	0.044	0.058	-0.034	0.094	0.092	0.262	0.085	-0.028	0.665	-0.134	-0.095	0.060	0.284	0.120
pc6	-0.204	0.157	0.274	-0.050	0.179	-0.013	-0.167	0.241	0.104	0.286	0.237	-0.113	0.777	0.007	0.063	0.072	0.370	0.157
pc7	-0.313	0.052	0.197	-0.233	-0.021	-0.017	-0.059	0.109	0.111	0.591	0.092	-0.022	0.871	-0.284	-0.122	0.160	0.310	0.127
pc8	-0.071	0.044	0.119	-0.128	-0.028	-0.017	0.162	-0.008	-0.034	0.090	-0.166	-0.034	0.274	-0.020	0.003	0.110	0.190	0.148
po1	-0.204	0.126	0.217	0.002	0.386	0.038	-0.342	0.218	0.085	-0.115	0.708	-0.054	0.219	0.040	0.180	0.059	0.356	-0.035
po2	-0.086	0.134	0.057	-0.104	0.434	0.232	0.144	0.152	-0.119	0.059	0.668	-0.232	0.197	-0.111	0.183	0.043	0.205	0.185
po3	-0.109	0.151	0.195	-0.177	0.374	0.198	0.092	0.142	-0.025	0.121	0.677	-0.179	0.284	0.048	0.112	0.067	0.194	0.128
po4	-0.242	0.210	0.079	-0.212	0.300	0.042	-0.023	0.093	0.205	0.075	0.790	-0.291	-0.053	-0.134	0.185	0.148	0.253	-0.033
po5	-0.065	-0.017	0.062	0.151	-0.024	-0.015	-0.135	-0.005	0.150	0.031	0.160	-0.054	0.106	-0.028	-0.003	-0.002	0.205	-0.026
ra1	-0.040	0.382	-0.061	-0.081	0.306	-0.015	-0.222	0.105	-0.016	-0.002	0.334	-0.106	-0.118	-0.120	0.038	-0.032	0.037	0.117
ra2	0.069	0.278	-0.120	0.021	0.248	0.074	-0.217	0.251	-0.083	-0.126	0.382	-0.012	-0.058	-0.001	0.280	0.148	-0.145	-0.019
ra3	-0.006	0.379	0.130	0.045	0.230	0.065	-0.066	0.149	0.066	-0.152	0.364	-0.117	-0.013	0.019	0.321	0.345	-0.024	-0.135
ra4	0.121	-0.038	-0.108	-0.140	0.385	-0.030	0.143	-0.008	-0.060	-0.318	-0.071	-0.039	-0.227	0.987	0.017	-0.119	-0.100	0.056
ra5	0.131	-0.030	-0.117	-0.110	0.393	-0.011	0.151	0.021	-0.044	-0.327	-0.082	-0.037	-0.225	0.989	0.041	-0.121	-0.106	0.057
ra6	-0.007	0.255	0.038	-0.207	0.313	-0.052	0.109	-0.020	0.020	-0.376	0.265	-0.060	-0.459	0.585	0.208	0.105	0.034	-0.099
ra7	0.117	-0.036	-0.108	-0.130	0.367	-0.030	0.158	-0.002	-0.044	-0.317	-0.112	-0.024	-0.230	0.985	0.021	-0.127	-0.117	0.070
ri1	-0.017	0.212	-0.140	-0.359	0.465	0.187	-0.096	0.181	0.149	-0.016	0.381	-0.342	-0.081	0.126	0.219	0.050	0.087	-0.014
ri2	-0.115	0.230	0.011	-0.131	0.220	-0.041	-0.135	-0.010	0.145	-0.143	0.277	-0.027	-0.291	0.009	0.219	0.222	0.120	-0.302
ri3	-0.338	0.357	-0.065	0.182	0.028	0.126	0.002	0.154	0.371	-0.123	0.100	0.026	-0.008	0.071	0.917	0.315	-0.073	-0.290
ri4	-0.097	-0.185	0.083	-0.112	0.350	0.713	0.188	0.001	0.031	0.055	0.161	-0.042	0.161	-0.014	0.472	-0.207	0.045	0.123

sel1	-0.358	0.422	0.152	-0.227	-0.204	-0.096	0.209	0.175	0.471	0.068	0.055	0.113	-0.042	0.018	0.192	0.753	0.067	-0.182
sel2	-0.504	0.456	0.300	-0.184	-0.195	-0.363	-0.132	0.169	0.353	0.207	0.067	0.114	0.112	-0.229	0.046	0.842	0.310	-0.168
sel3	-0.398	0.286	0.235	-0.128	-0.084	-0.158	0.030	0.204	0.301	0.043	0.195	0.166	0.008	-0.078	0.228	0.830	0.247	-0.109
sel4	-0.432	0.401	0.295	-0.105	-0.209	-0.278	-0.015	0.152	0.267	0.230	0.160	0.133	0.153	-0.284	0.251	0.819	0.258	-0.168
sel5	-0.349	0.432	0.279	0.098	-0.011	-0.320	-0.173	0.261	0.427	-0.046	0.016	0.133	0.132	0.100	0.318	0.666	0.225	-0.154
sel6	-0.107	0.242	0.020	-0.124	0.208	-0.033	-0.129	0.001	0.151	-0.134	0.284	-0.027	-0.286	-0.019	0.217	0.242	0.114	-0.280
sel7	-0.534	0.469	0.320	0.050	-0.062	-0.365	-0.013	0.198	0.474	0.168	0.029	0.160	0.162	0.051	0.322	0.755	0.309	-0.235
sex	0.040	-0.071	0.049	-0.199	-0.152	0.233	1.000	-0.124	-0.066	-0.037	-0.129	0.242	-0.104	0.135	0.005	-0.033	-0.138	0.335
tl1	-0.320	-0.026	0.357	-0.059	0.160	-0.104	-0.173	-0.016	0.189	0.368	0.154	-0.282	0.384	-0.194	-0.111	0.088	0.688	-0.208
tl10	-0.194	0.116	0.684	-0.071	0.181	-0.274	-0.220	0.011	-0.216	-0.010	0.197	-0.087	0.158	-0.025	-0.208	0.091	0.716	0.123
tl2	-0.467	0.202	0.517	-0.340	0.258	-0.044	-0.153	0.113	0.341	0.346	0.401	-0.140	0.357	-0.057	0.113	0.372	0.858	-0.126
tl3	-0.459	0.283	0.560	-0.273	0.120	-0.099	-0.064	-0.125	0.289	0.428	0.330	-0.097	0.336	-0.179	-0.101	0.189	0.860	0.024
tl4	-0.453	0.352	0.559	-0.155	0.098	-0.208	-0.156	0.141	0.294	0.461	0.360	-0.207	0.401	-0.302	-0.017	0.399	0.878	-0.110
tl5	-0.435	0.374	0.605	-0.146	0.159	-0.145	-0.057	0.001	0.327	0.107	0.393	-0.026	0.214	-0.028	0.006	0.407	0.852	-0.078
tl6	-0.256	0.111	0.311	-0.202	0.079	-0.036	-0.170	0.054	0.239	0.300	0.228	-0.244	0.412	-0.121	-0.055	0.248	0.697	-0.055
tl7	-0.177	0.062	0.361	0.125	0.229	0.018	-0.114	0.098	0.114	0.071	0.195	-0.055	0.150	-0.028	0.184	0.060	0.510	-0.098
tl8	-0.286	0.186	0.709	0.006	0.193	-0.139	0.065	0.043	0.032	0.079	0.365	-0.039	0.238	0.023	0.149	0.238	0.771	0.077
tl9	-0.210	-0.050	0.544	-0.037	0.242	0.040	-0.065	0.180	-0.098	0.110	0.182	0.040	0.342	-0.022	-0.094	0.015	0.696	0.244
wi1	-0.076	-0.108	0.378	0.023	0.286	-0.047	-0.028	0.120	-0.107	0.424	0.170	-0.124	0.590	0.191	-0.070	-0.012	0.420	0.329
wi2	0.092	-0.128	0.297	-0.032	0.355	-0.023	0.077	0.141	-0.238	0.309	0.172	-0.171	0.405	0.208	-0.216	-0.163	0.235	0.538
wi3	0.101	-0.101	0.311	0.008	0.356	0.097	0.071	0.256	-0.355	0.243	0.143	-0.047	0.475	0.157	-0.117	-0.090	0.131	0.644
wi4	0.082	-0.308	0.342	-0.007	0.328	0.027	0.002	0.228	-0.444	0.316	0.014	0.106	0.484	0.220	-0.166	-0.198	0.234	0.485
wi5	0.008	-0.076	0.048	0.168	0.090	0.116	-0.241	0.022	0.014	0.262	-0.089	-0.153	0.288	-0.111	0.035	0.014	0.093	-0.142
wi6	-0.148	-0.064	0.275	-0.010	0.240	-0.023	-0.309	0.166	0.114	0.375	0.109	-0.297	0.393	0.170	0.116	0.124	0.262	-0.426
wi7	0.060	0.101	-0.080	-0.131	-0.023	-0.029	0.140	-0.009	0.177	0.112	0.064	-0.038	0.011	-0.040	-0.128	0.165	0.084	0.231

APPENDIX 4A

Test for Non-Response Bias using independent t-test

Table A1: Mean Comparison between early and late respondents: Group Statistics

	Order of arrival of questionnaires	N	Mean	S.D	Std. Error Mean
You come up with new ways and practical ideas to improve performance.	Early	97	3.75	.936	.095
	Late	262	3.78	.860	.053
You search out new technologies, processes, techniques, and/or product ideas.	Early	97	3.72	.987	.100
	Late	262	3.78	.904	.056
You suggest new ways to increase quality.	Early	97	3.90	.963	.098
	Late	262	3.89	1.005	.062
You are a good source of creative ideas?	Early	97	3.91	.958	.097
	Late	262	3.97	.938	.058
You are not afraid to take risks.	Early	97	3.87	.874	.089
	Late	262	3.85	.952	.059
You promote and champion ideas to others.	Early	97	3.80	.943	.096
	Late	262	3.91	.888	.055
You exhibit creativity on the job when given the opportunity	Early	97	3.89	.988	.100
	Late	262	3.80	.889	.055
You develop adequate plans and schedules for the implementation of new ideas.	Early	97	3.73	.963	.098
	Late	262	3.72	.949	.059
You often have new and innovative ideas.	Early	97	3.70	1.052	.107
	Late	261	3.80	.905	.056
You come up with creative solutions to problems.	Early	97	3.76	1.028	.104
	Late	262	3.84	.858	.053
You often have a fresh approach to problems.	Early	97	3.77	.919	.093
	Late	262	3.84	.818	.051
You suggest new ways of performing work tasks.	Early	97	3.74	1.013	.103
	Late	262	3.90	.783	.048
You suggest new ways to achieve goals or objectives	Early	97	3.90	.930	.094
	Late	262	3.98	.714	.044
Keep tough problems from getting you down	Early	97	3.72	.965	.098
	Late	262	3.60	.899	.056
Bounce back after you tried your best and failed	Early	97	3.78	1.073	.109
	Late	262	3.84	.853	.053
Get yourself to keep trying when things are going really bad	Early	97	3.92	.965	.098
	Late	262	3.97	.735	.045
Keep your spirit when you suffer hardship	Early	97	4.01	.952	.097
	Late	262	3.99	.833	.051
Get rid of self-doubts after you have tough setbacks	Early	97	3.54	1.146	.116
	Late	262	3.52	.925	.057
Keep from being easily rattled	Early	97	3.49	1.081	.110
	Late	262	3.60	.895	.055
Overcome discouragement when nothing you try seems to work	Early	97	3.69	1.193	.121
	Late	262	3.81	.825	.051
It is difficult to tell a supervisor or co-worker I cannot help	Early	97	3.07	1.438	.146
	Late	262	3.23	1.046	.065
It is my responsibility to be helpful to my supervisor and co-workers	Early	97	4.02	1.070	.109
	Late	262	3.98	.807	.050
	Early	97	3.76	1.039	.105

Colleagues generally turn to me when they have problems	Late	262	3.84	.799	.049
I characterize myself as a rescuer	Early	97	3.76	1.068	.108
	Late	262	3.82	.885	.055
I often read materials related to my work to improve my ability	Early	97	3.86	1.173	.119
	Late	262	3.65	.950	.059
I am willing to select a challenging work assignment that I can learn a lot from	Early	97	3.86	1.146	.116
	Late	262	3.90	.836	.052
I often look for opportunities to develop new skills and knowledge	Early	97	4.11	1.030	.105
	Late	262	3.92	.829	.051
I enjoy challenging and difficult tasks at work where I'll learn new skills	Early	97	3.87	.931	.095
	Late	262	3.81	.871	.054
For me, the development of my workability is important enough to take risks	Early	97	3.93	.971	.099
	Late	262	3.78	.808	.050
I prefer to work in situations that require a high level of ability and talent	Early	97	4.11	.877	.089
	Late	262	3.94	.748	.046
I would rather prove my ability on a task that I can do well at than to try a new task	Early	97	3.30	1.260	.128
	Late	262	3.27	.895	.055
I am concerned with showing that I can perform better than my co-workers.	Early	97	2.57	1.290	.131
	Late	262	3.22	1.152	.071
I try to figure out what it takes to prove my ability to others at work	Early	97	3.42	1.126	.114
	Late	262	3.43	.951	.059
I enjoy it when others at work are aware of how well am doing	Early	97	3.20	1.434	.146
	Late	262	3.63	.969	.060
I prefer to work on projects where I can prove my ability to others	Early	96	3.13	1.363	.139
	Late	262	3.07	1.234	.076
I have to do things that should be done differently	Early	97	3.20	1.124	.114
	Late	262	3.16	.977	.060
I lack policies and guidelines to help me	Early	97	2.06	1.097	.111
	Late	262	2.47	1.045	.065
I work under incompatible policies and guidelines	Early	97	2.46	1.173	.119
	Late	262	2.78	1.045	.065
I have to "feel my way" in performing my duties	Early	97	2.60	1.255	.127
	Late	262	3.18	1.054	.065
I am uncertain how my work is linked	Early	97	2.35	1.347	.137
	Late	262	2.89	1.129	.070
I have to work under vague directives and orders	Early	97	2.53	1.300	.132
	Late	262	2.86	1.103	.068
I do not know if my work will be acceptable to my boss	Early	97	2.36	1.226	.125
	Late	262	2.86	1.146	.071
My pay increases and other tangible rewards depend on how well I follow work procedures.	Early	97	2.91	1.347	.137
	Late	262	2.95	1.057	.065
My pay increases and other tangible rewards depend on my knowledge of work procedures.	Early	97	2.87	1.288	.131
	Late	262	3.30	1.088	.067
My immediate supervisor monitors the extent to which I follow established procedures	Early	97	3.28	1.231	.125
	Late	262	3.54	.899	.056
My immediate supervisor evaluates procedures I use to accomplish the task of working	Early	97	3.34	1.241	.126
	Late	262	3.45	.936	.058
My immediate supervisor modifies the procedures if desired results are not obtained	Early	97	3.43	1.198	.122
	Late	262	3.54	.899	.056

Primary weight in evaluating employees' performance is placed on work behaviour.	Early	97	3.47	1.234	.125
	Late	262	3.54	.882	.055
Employees are accountable for their actions in work performance regardless of the results they achieve	Early	97	3.66	1.207	.123
	Late	262	3.74	.823	.051
I receive feedback on how I accomplish my goals.	Early	97	3.56	1.172	.119
	Late	262	3.81	.781	.048
My salary increases and other benefits depend on how my performance meets my goals	Early	97	3.10	1.319	.134
	Late	262	3.19	1.002	.062
I will always have to explain why my performance goals are not met	Early	97	3.28	1.038	.105
	Late	262	3.43	.943	.058
Performance evaluations of employees place primary emphasis on results	Early	97	3.62	1.113	.113
	Late	262	3.74	.795	.049
My pay increases and other benefits depend on the degree to which I achieve specific goals	Early	97	2.91	1.300	.132
	Late	262	3.15	1.079	.067
My direct supervisor monitors the extent to which I achieve my performance goals	Early	97	3.11	1.172	.119
	Late	262	3.55	.895	.055
I receive feedback from my direct supervisor on the extent to which I achieve my performance goals	Early	97	3.30	1.138	.116
	Late	262	3.56	.868	.054
My job has specific performance goals	Early	97	3.71	1.010	.103
	Late	261	3.80	.823	.051
My supervisor expresses his/her confidence that we will achieve our goals	Early	97	3.73	1.159	.118
	Late	262	3.55	.952	.059
My supervisor has a strong purpose	Early	97	3.96	1.030	.105
	Late	262	3.98	.853	.053
My supervisor articulates a compelling vision of the future	Early	97	3.85	.950	.096
	Late	262	3.86	.862	.053
My supervisor talks optimistically about the future	Early	97	3.85	1.024	.104
	Late	262	3.88	.989	.061
My supervisor seeks differing perspectives when solving problems	Early	97	3.70	1.138	.116
	Late	262	3.80	.930	.057
My supervisor re-examines critical assumptions, whether they are appropriate	Early	97	3.73	1.036	.105
	Late	262	3.63	.981	.061
My supervisor got me to look at the task from many different angles	Early	97	3.68	1.085	.110
	Late	262	3.72	.933	.058
My supervisor spends time teaching and coaching me	Early	97	3.58	1.088	.110
	Late	262	3.24	1.154	.071
My supervisor suggests new ways of doing work	Early	97	3.80	.943	.096
	Late	262	3.66	.936	.058
My supervisor helps group members to develop their strengths	Early	97	3.94	.922	.094
	Late	262	3.86	.795	.049
My supervisor shows he/she has confidence in my ability to meet most objectives	Early	97	3.86	.989	.100
	Late	262	3.62	.970	.060
My supervisor lets me know he/she expects me to perform at my highest level.	Early	97	3.95	1.084	.110
	Late	262	3.95	.754	.047
My supervisor consistently sets challenging goals for me to attain	Early	97	3.68	1.095	.111
	Late	262	3.79	.840	.052
My supervisor encourages continual improvement in my performance	Early	97	3.99	.984	.100
	Late	262	3.90	.820	.051
My organization provides rewards for skilled employees commensurate with their performance.	Early	97	3.25	1.259	.128
	Late	262	3.49	1.027	.063

My organization provides bonuses for workers according to their post and consistent with their level of performance	Early	97	3.01	1.327	.135
	Late	262	3.08	1.054	.065
My organization provides overtime payments to employees after working hours.	Early	97	2.92	1.412	.143
	Late	262	3.13	1.192	.074
My organization provides financial incentives to employees when they work professionally.	Early	97	3.13	1.255	.127
	Late	262	3.19	1.066	.066
My organization ensures appropriate social security and health insurance for employees.	Early	97	3.63	1.219	.124
	Late	262	3.59	1.020	.063
My organization provides appropriate offices and well-furnished ones for employees.	Early	97	3.45	1.118	.114
	Late	262	3.68	.997	.062
Employees are promoted when they earn academic qualifications or training	Early	97	3.00	1.275	.129
	Late	262	3.37	.989	.061
My tasks are extraordinary and particularly difficult	Early	97	2.67	1.048	.106
	Late	262	3.08	.995	.061
I often have to make very complicated decisions in my work.	Early	97	2.71	1.181	.120
	Late	262	3.35	1.009	.062
I use all my knowledge and skills in my work.	Early	97	3.57	1.181	.120
	Late	262	3.80	.913	.056
I learn new things in my work.	Early	97	4.07	1.073	.109
	Late	262	4.15	.812	.050
Conduct personal business during work time	Early	97	1.49	.926	.094
	Late	262	1.33	.773	.048
Absent yourself from work without permission	Early	97	1.34	.762	.077
	Late	262	1.31	.717	.044
Intentionally do slow or sloppy work	Early	97	1.28	.625	.063
	Late	262	1.47	.736	.045
Use sick leave when not really sick	Early	97	1.35	.878	.089
	Late	262	1.32	.750	.046
Leave work early without permission	Early	97	1.34	.748	.076
	Late	262	1.35	.778	.048
Play computer games during work time	Early	97	1.49	.937	.095
	Late	262	1.44	.836	.052
Disobey supervisor's instructions	Early	97	1.33	.800	.081
	Late	262	1.29	.696	.043
Lie to employer or supervisor to cover up a mistake	Early	97	1.40	.943	.096
	Late	262	1.45	.890	.055
Wastes company materials intentionally	Early	97	1.43	.999	.101
	Late	262	1.24	.595	.037
Discuss confidential matters with unauthorized personnel within or outside the organization	Early	97	1.44	.935	.095
	Late	262	1.25	.598	.037
Spend time on the internet for reasons not related to work	Early	97	1.54	.969	.098
	Late	262	1.23	.628	.039
Take cash and property belonging to the company	Early	97	1.28	.774	.079
	Late	262	1.14	.454	.028

Table A2: Independent Samples t-Test between early and late respondents

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
You come up with new ways and practical ideas to improve performance.	Equal variances assumed	.773	.380	-.249	357	.804
	Equal variances not assumed			-.239	159.726	.811
You search out new technologies, processes, techniques, and/or product ideas.	Equal variances assumed	4.806	.029	-.517	357	.605
	Equal variances not assumed			-.497	159.226	.620
You suggest new ways to increase quality.	Equal variances assumed	.928	.336	.064	357	.949
	Equal variances not assumed			.066	178.470	.948
You are a good source of creative ideas?	Equal variances assumed	.978	.323	-.555	357	.579
	Equal variances not assumed			-.550	168.424	.583
You are not afraid to take risks.	Equal variances assumed	.911	.341	.100	357	.921
	Equal variances not assumed			.104	185.752	.918
You promote and champion ideas to others.	Equal variances assumed	.348	.556	-.972	357	.332
	Equal variances not assumed			-.945	162.991	.346
You exhibit creativity on the job when given opportunity	Equal variances assumed	.262	.609	.816	357	.415
	Equal variances not assumed			.777	156.963	.438
You develop adequate plans and schedules for the implementation of new ideas.	Equal variances assumed	.010	.920	.127	357	.899
	Equal variances not assumed			.126	169.399	.900
You often have new and innovative ideas.	Equal variances assumed	6.087	.014	-.920	356	.358
	Equal variances not assumed			-.858	151.806	.392
You come up with creative solutions to problems.	Equal variances assumed	6.632	.010	-.677	357	.499
	Equal variances not assumed			-.623	148.170	.534
You often have a fresh approach to problems.	Equal variances assumed	4.593	.033	-.699	357	.485
	Equal variances not assumed			-.663	155.683	.508
You suggest new ways of performing work tasks.	Equal variances assumed	15.634	.000	-1.529	357	.127
	Equal variances not assumed			-1.360	140.673	.176
You suggest new ways to achieve goals or objectives	Equal variances assumed	10.616	.001	-.909	357	.364

	Equal variances not assumed			-.806	140.000	.421
Keep tough problems from getting you down	Equal variances assumed	.484	.487	1.157	357	.248
	Equal variances not assumed			1.120	161.463	.264
Bounce back after you tried your best and failed	Equal variances assumed	11.193	.001	-.480	357	.631
	Equal variances not assumed			-.433	143.335	.666
Get yourself to keep trying when things are going really bad	Equal variances assumed	16.409	.000	-.584	357	.559
	Equal variances not assumed			-.517	139.272	.606
Keep your spirit when you suffer hardship	Equal variances assumed	4.261	.040	.211	357	.833
	Equal variances not assumed			.199	153.563	.843
Get rid of self-doubts after you have tough setbacks	Equal variances assumed	10.889	.001	.112	357	.911
	Equal variances not assumed			.102	144.790	.919
Keep from being easily rattled	Equal variances assumed	8.064	.005	-.926	357	.355
	Equal variances not assumed			-.849	147.349	.397
Overcome discouragement when nothing you try seems to work	Equal variances assumed	28.281	.000	-1.096	357	.274
	Equal variances not assumed			-.930	131.503	.354
It is difficult to tell a supervisor or co-worker I cannot help	Equal variances assumed	27.118	.000	-1.106	357	.270
	Equal variances not assumed			-.958	135.409	.340
It is my responsibility to be helpful to my supervisor and co-workers	Equal variances assumed	14.541	.000	.341	357	.733
	Equal variances not assumed			.300	138.405	.765
Colleagues generally turn to me when they have problems	Equal variances assumed	17.974	.000	-.780	357	.436
	Equal variances not assumed			-.692	140.196	.490
I characterize myself as a rescuer	Equal variances assumed	5.759	.017	-.518	357	.605
	Equal variances not assumed			-.475	147.524	.635
I often read materials related to my work to improve my ability	Equal variances assumed	7.012	.008	1.715	357	.087
	Equal variances not assumed			1.558	145.211	.121
I am willing to select a challenging work assignment that I can learn a lot from	Equal variances assumed	25.649	.000	-.443	357	.658
	Equal variances not assumed			-.384	135.696	.701
	Equal variances assumed	6.588	.011	1.835	357	.067

I often look for opportunities to develop new skills and knowledge	Equal variances not assumed			1.663	144.543	.099
I enjoy challenging and difficult tasks at work where I'll learn new skills	Equal variances assumed	.108	.742	.503	357	.616
	Equal variances not assumed			.487	161.942	.627
For me, the development of my workability is important enough to take risks	Equal variances assumed	4.516	.034	1.430	357	.153
	Equal variances not assumed			1.316	148.028	.190
I prefer to work in situations that require a high level of ability and talent	Equal variances assumed	5.535	.019	1.912	357	.057
	Equal variances not assumed			1.778	150.666	.077
I would rather prove my ability on a task that I can do well at than to try a new task	Equal variances assumed	29.358	.000	.266	357	.791
	Equal variances not assumed			.228	133.565	.820
I am concerned with showing that I can perform better than my co-workers.	Equal variances assumed	5.070	.025	-4.596	357	.000
	Equal variances not assumed			-4.363	156.070	.000
I try to figure out what it takes to prove my ability to others at work	Equal variances assumed	5.443	.020	-.040	357	.968
	Equal variances not assumed			-.037	149.602	.970
I enjoy it when others at work are aware of how well am doing	Equal variances assumed	42.027	.000	-3.309	357	.001
	Equal variances not assumed			-2.781	129.825	.006
I prefer to work on projects where I can prove my ability to others	Equal variances assumed	1.877	.172	.346	356	.729
	Equal variances not assumed			.331	155.551	.741
I have to do things that should be done differently	Equal variances assumed	7.070	.008	.294	357	.769
	Equal variances not assumed			.276	152.854	.783
I lack policies and guidelines to help me	Equal variances assumed	.015	.902	-3.206	357	.001
	Equal variances not assumed			-3.135	164.491	.002
I work under incompatible policies and guidelines	Equal variances assumed	8.457	.004	-2.449	357	.015
	Equal variances not assumed			-2.323	155.773	.021
I have to "feel my way" in performing my duties	Equal variances assumed	9.877	.002	-4.372	357	.000
	Equal variances not assumed			-4.035	148.901	.000
I am uncertain how my work is linked	Equal variances assumed	11.354	.001	-3.778	357	.000
	Equal variances not assumed			-3.486	148.743	.001
I have to work under vague directives and orders	Equal variances assumed	11.323	.001	-2.416	357	.016

	Equal variances not assumed			-2.242	150.131	.026
I do not know if my work will be acceptable to my boss	Equal variances assumed	2.650	.104	-3.613	357	.000
	Equal variances not assumed			-3.503	161.942	.001
My pay increases and other tangible rewards depend on how well I follow work procedures.	Equal variances assumed	20.039	.000	-.346	357	.729
	Equal variances not assumed			-.310	142.025	.757
My pay increases and other tangible rewards depend on my knowledge of work procedures.	Equal variances assumed	5.335	.021	-3.172	357	.002
	Equal variances not assumed			-2.936	149.551	.004
My immediate supervisor monitors the extent to which I follow established procedures	Equal variances assumed	17.497	.000	-2.187	357	.029
	Equal variances not assumed			-1.899	135.740	.060
My immediate supervisor evaluates procedures I use to accomplish the task of working	Equal variances assumed	14.549	.000	-.903	357	.367
	Equal variances not assumed			-.795	138.496	.428
My immediate supervisor modifies the procedures if desired results are not obtained	Equal variances assumed	14.317	.000	-.928	357	.354
	Equal variances not assumed			-.815	138.005	.416
Primary weight in evaluating employees' performance is placed on work behaviour.	Equal variances assumed	24.258	.000	-.544	357	.587
	Equal variances not assumed			-.468	134.001	.641
Employees are accountable for their actions in work performance regardless of the results they achieve	Equal variances assumed	24.066	.000	-.687	357	.493
	Equal variances not assumed			-.579	130.502	.563
I receive feedback on how I accomplish my goals.	Equal variances assumed	30.981	.000	-2.317	357	.021
	Equal variances not assumed			-1.936	128.833	.055
My salary increases and other benefits depend on how my performance meets my goals	Equal variances assumed	22.106	.000	-.644	357	.520
	Equal variances not assumed			-.569	139.047	.570
I will always have to explain why my performance goals are not met	Equal variances assumed	.597	.440	-1.294	357	.196
	Equal variances not assumed			-1.238	158.175	.217
Performance evaluations of employees place primary emphases on results	Equal variances assumed	27.911	.000	-1.114	357	.266
	Equal variances not assumed			-.959	133.916	.340
My pay increases and other benefits depend on the degree to which I achieve specific goals	Equal variances assumed	7.663	.006	-1.807	357	.072
	Equal variances not assumed			-1.660	147.710	.099
	Equal variances assumed	7.977	.005	-3.724	357	.000

My direct supervisor monitors the extent to which I achieve my performance goals	Equal variances not assumed			-3.297	139.549	.001
I receive feedback from my direct supervisor on the extent to which I achieve my performance goals	Equal variances assumed	11.572	.001	-2.326	357	.021
	Equal variances not assumed			-2.058	139.400	.041
My job has specific performance goals	Equal variances assumed	11.267	.001	-.820	356	.413
	Equal variances not assumed			-.747	145.989	.456
My supervisor expresses his/her confidence that we will achieve our goals	Equal variances assumed	4.697	.031	1.484	357	.139
	Equal variances not assumed			1.357	146.601	.177
My supervisor has a strong purpose	Equal variances assumed	15.597	.000	-.242	357	.809
	Equal variances not assumed			-.222	147.460	.825
My supervisor articulates a compelling vision of the future	Equal variances assumed	2.684	.102	-.127	357	.899
	Equal variances not assumed			-.122	157.961	.903
My supervisor talks optimistically about the future	Equal variances assumed	.002	.965	-.306	357	.760
	Equal variances not assumed			-.301	166.455	.764
My supervisor seeks differing perspectives when solving problems	Equal variances assumed	4.412	.036	-.854	357	.394
	Equal variances not assumed			-.779	146.042	.437
My supervisor re-examines critical assumptions, whether they are appropriate	Equal variances assumed	.012	.913	.863	357	.389
	Equal variances not assumed			.842	163.661	.401
My supervisor got me to look at the task from many different angles	Equal variances assumed	2.319	.129	-.320	357	.749
	Equal variances not assumed			-.299	151.514	.766
My supervisor spends time in teaching and coaching me	Equal variances assumed	1.881	.171	2.522	357	.012
	Equal variances not assumed			2.591	180.986	.010
My supervisor suggests new ways of doing work	Equal variances assumed	1.176	.279	1.290	357	.198
	Equal variances not assumed			1.286	170.577	.200
My supervisor helps group members to develop their strengths	Equal variances assumed	1.133	.288	.765	357	.445
	Equal variances not assumed			.715	151.909	.476
My supervisor shows that he/she has confidence in my ability to meet most objectives	Equal variances assumed	.347	.556	2.015	357	.045
	Equal variances not assumed			1.996	168.628	.048
	Equal variances assumed	26.379	.000	-.019	357	.985

My supervisor lets me know he/she expects me to perform at my highest level.	Equal variances not assumed			-.016	131.929	.987
My supervisor consistently sets challenging goals for me to attain	Equal variances assumed	18.076	.000	-.973	357	.331
	Equal variances not assumed			-.863	139.918	.390
My supervisor encourages continual improvement in my performance	Equal variances assumed	2.220	.137	.863	357	.389
	Equal variances not assumed			.794	148.064	.429
My organization provides rewards for skilled employees commensurate with their performance.	Equal variances assumed	11.322	.001	-1.854	357	.065
	Equal variances not assumed			-1.690	145.940	.093
My organization provides bonuses for workers according to their post and consistent with their level of performance	Equal variances assumed	15.621	.000	-.546	357	.585
	Equal variances not assumed			-.492	143.259	.623
My organization provides overtime payments to employees after working hours.	Equal variances assumed	9.797	.002	-1.397	357	.163
	Equal variances not assumed			-1.293	149.530	.198
My organization provides financial incentives to employees when they work professionally.	Equal variances assumed	7.770	.006	-.427	357	.670
	Equal variances not assumed			-.396	150.149	.693
My organization ensures appropriate social security and health insurance for employees.	Equal variances assumed	6.434	.012	.291	357	.771
	Equal variances not assumed			.268	148.506	.789
My organization provides appropriate offices and well-furnished ones for employees.	Equal variances assumed	4.983	.026	-1.811	357	.071
	Equal variances not assumed			-1.718	155.854	.088
Employees are promoted when they earn academic qualifications or training	Equal variances assumed	9.468	.002	-2.903	357	.004
	Equal variances not assumed			-2.587	140.943	.011
My tasks are extraordinary and particularly difficult	Equal variances assumed	1.914	.167	-3.450	357	.001
	Equal variances not assumed			-3.368	163.978	.001
I often have to make very complicated decisions in my work.	Equal variances assumed	6.444	.012	-5.088	357	.000
	Equal variances not assumed			-4.734	150.832	.000
I use all my knowledge and skills in my work.	Equal variances assumed	18.186	.000	-1.989	357	.048
	Equal variances not assumed			-1.770	140.703	.079
I learn new things in my work.	Equal variances assumed	13.752	.000	-.762	357	.447
	Equal variances not assumed			-.671	138.693	.503
Conduct personal business during work time	Equal variances assumed	6.420	.012	1.676	357	.095

	Equal variances not assumed			1.544	148.393	.125
Absent yourself from work without permission	Equal variances assumed	.389	.533	.314	357	.754
	Equal variances not assumed			.305	162.859	.761
Intentionally do slow or sloppy work	Equal variances assumed	9.003	.003	-2.318	357	.021
	Equal variances not assumed			-2.498	200.438	.013
Use sick leave when not really sick	Equal variances assumed	1.101	.295	.361	357	.718
	Equal variances not assumed			.336	150.726	.738
Leave work early without permission	Equal variances assumed	.171	.679	-.161	357	.872
	Equal variances not assumed			-.164	177.721	.870
Play computer games during work time	Equal variances assumed	1.411	.236	.544	357	.587
	Equal variances not assumed			.517	156.007	.606
Disobey supervisor's instructions	Equal variances assumed	.872	.351	.418	357	.676
	Equal variances not assumed			.392	152.893	.696
Lie to employer or supervisor to cover up a mistake	Equal variances assumed	.152	.696	-.449	357	.653
	Equal variances not assumed			-.438	163.307	.662
Wastes company materials intentionally	Equal variances assumed	20.699	.000	2.187	357	.029
	Equal variances not assumed			1.749	122.085	.083
Discuss confidential matters with unauthorized personnel within or outside the organization	Equal variances assumed	19.624	.000	2.285	357	.023
	Equal variances not assumed			1.879	126.223	.063
Spend time on the internet for reasons not related to work	Equal variances assumed	30.783	.000	3.471	357	.001
	Equal variances not assumed			2.868	127.012	.005
Take cash and property belonging to the company	Equal variances assumed	16.222	.000	2.067	357	.039
	Equal variances not assumed			1.644	121.292	.103

APPENDIX 4B

Other Employee Background Results

B1 - What is the industry of your organization? -Employee

	Frequency	Percent	Valid Percent	Cumulative Percent
	1	.3	.3	.3
Advertising	1	.3	.3	.6
Administrative / support	1	.3	.3	.8
Advertisement	2	.6	.6	1.4
Advertising	99	27.6	27.6	29.0
Advertisement	2	.6	.6	29.5
Advertising	6	1.7	1.7	31.2
Advertising	1	.3	.3	31.5
ATSP	7	1.9	1.9	33.4
banner	1	.3	.3	33.7
Bill board	5	1.4	1.4	35.1
Books Printing	1	.3	.3	35.4
Books Publishing	1	.3	.3	35.7
branding	3	.8	.8	36.5
Branding	8	2.2	2.2	38.7
Broadcasting	1	.3	.3	39.0
business	3	.8	.8	39.8
Business	4	1.1	1.1	40.9
Commercial	1	.3	.3	41.2
Commercial Printing	2	.6	.6	41.8
communication	1	.3	.3	42.1
Communication	2	.6	.6	42.6
Consultancy	1	.3	.3	42.9
Creative	1	.3	.3	43.2
Design build	1	.3	.3	43.5
designing	2	.6	.6	44.0
Designing	6	1.7	1.7	45.7
Digital printing	1	.3	.3	46.0
General Printing	1	.3	.3	46.2
Graphic	8	2.2	2.2	48.5
Graphic designing	4	1.1	1.1	49.6
Graphic designing	1	.3	.3	49.9
Graphic designing	1	.3	.3	50.1
Graphics	1	.3	.3	50.4
IT	1	.3	.3	50.7
Journalism	1	.3	.3	51.0
marketing	2	.6	.6	51.5
marketing communication	1	.3	.3	51.8
marketing communication	2	.6	.6	52.4
media	51	14.2	14.2	66.6

Media	33	9.2	9.2	75.8
Media production	1	.3	.3	76.0
PR	2	.6	.6	76.6
Print	1	.3	.3	76.9
Print media	1	.3	.3	77.2
printing	20	5.6	5.6	82.7
Printing	51	14.2	14.2	96.9
Printing Press	1	.3	.3	97.2
Printing press and shirt	1	.3	.3	97.5
printing	1	.3	.3	97.8
Prints and advertising	1	.3	.3	98.1
Production	1	.3	.3	98.3
souvenirs	1	.3	.3	98.6
Souvenirs	5	1.4	1.4	100.0
Total	359	100.0	100.0	

B2 - What type of service/product do you provide in your organisation?-Employee

	Frequency	Percent	Valid Percent	Cumulative Percent
	3	.8	.8	.8
Accounting	1	.3	.3	1.1
Administrative	1	.3	.3	1.4
Administration	1	.3	.3	1.7
advertisement	1	.3	.3	1.9
Advertisement	1	.3	.3	2.2
Advertising	46	12.8	12.8	15.0
Advertisement	9	2.5	2.5	17.5
Adverts	1	.3	.3	17.8
Adverts, media	1	.3	.3	18.1
Advertising	1	.3	.3	18.4
banner	1	.3	.3	18.7
Banners	1	.3	.3	18.9
bill board	4	1.1	1.1	20.1
Bill board	8	2.2	2.2	22.3
bill board consultancy	1	.3	.3	22.6
binding	2	.6	.6	23.1
Binding	4	1.1	1.1	24.2
Books	4	1.1	1.1	25.3
Books production, binding	1	.3	.3	25.6
Books Publishing	1	.3	.3	25.9
branding	2	.6	.6	26.5
Branding	21	5.8	5.8	32.3
Branding, printing	1	.3	.3	32.6
Branding, Printing	1	.3	.3	32.9
Business centre	1	.3	.3	33.1
Coding	1	.3	.3	33.4
colour separation	1	.3	.3	33.7
Consultancy	2	.6	.6	34.3
creative	2	.6	.6	34.8
Designing	1	.3	.3	35.1
Designing	1	.3	.3	35.4
design	1	.3	.3	35.7
Design	1	.3	.3	35.9
designing	11	3.1	3.1	39.0
Designing	16	4.5	4.5	43.5
Designing	1	.3	.3	43.7
digital printing	1	.3	.3	44.0
experimental marketing	1	.3	.3	44.3
General printing	1	.3	.3	44.6
Graphic	1	.3	.3	44.8
Graphic designing	2	.6	.6	45.4
Graphic Designing	1	.3	.3	45.7

Graphics	1	.3	.3	46.0
Information	1	.3	.3	46.2
Journalism	1	.3	.3	46.5
marketing	2	.6	.6	47.1
media	14	3.9	3.9	51.0
Media	5	1.4	1.4	52.4
news	1	.3	.3	52.6
News	20	5.6	5.6	58.2
news producer	1	.3	.3	58.5
News producer	1	.3	.3	58.8
news reporter	2	.6	.6	59.3
P.A /Presenter	1	.3	.3	59.6
PR	29	8.1	8.1	67.7
Pre-press	3	.8	.8	68.5
Printing	1	.3	.3	68.8
print	1	.3	.3	69.1
Print	1	.3	.3	69.4
print out	1	.3	.3	69.6
Print out	1	.3	.3	69.9
Print, branding	1	.3	.3	70.2
printing	45	12.5	12.5	82.7
Printing	45	12.5	12.5	95.3
prints	2	.6	.6	95.8
Prints	1	.3	.3	96.1
production	2	.6	.6	96.7
Publishing	2	.6	.6	97.2
screen printing	1	.3	.3	97.5
services	4	1.1	1.1	98.6
Souvenirs	1	.3	.3	98.9
stationary supply	1	.3	.3	99.2
support activities	1	.3	.3	99.4
TV contents	1	.3	.3	99.7
Video	1	.3	.3	100.0
Total	359	100.0	100.0	

APPENDIX 4C

Supervisor Background Results

4C1 - What is the industry of your organization?-Supervisor

	Frequency	Percent	Valid Percent	Cumulative Percent
Branding	1	.3	.3	.3
Advertising	1	.3	.3	.6
Advertising	101	28.1	28.1	28.7
Advertising company	1	.3	.3	29.0
Advertisement	4	1.1	1.1	30.1
Advertising	7	1.9	1.9	32.0
Advertising	1	.3	.3	32.3
Binding	8	2.2	2.2	34.5
Book printing	1	.3	.3	34.8
Book Printing	1	.3	.3	35.1
Books Publishing	2	.6	.6	35.7
branding	5	1.4	1.4	37.0
Branding	23	6.4	6.4	43.5
Broadcasting	1	.3	.3	43.7
Consultancy	1	.3	.3	44.0
designing	2	.6	.6	44.6
Designing	15	4.2	4.2	48.7
Designing printing	1	.3	.3	49.0
Graphic	1	.3	.3	49.3
Graphic designing	3	.8	.8	50.1
Graphic designing	1	.3	.3	50.4
Graphic designing	1	.3	.3	50.7
marketing	3	.8	.8	51.5
marketing communication	3	.8	.8	52.4
media	47	13.1	13.1	65.5
Media	33	9.2	9.2	74.7
PR	3	.8	.8	75.5
Print	9	2.5	2.5	78.0
printing	15	4.2	4.2	82.2
Printing	51	14.2	14.2	96.4
Printing & Designing	2	.6	.6	96.9
Printing press	7	1.9	1.9	98.9
Production	3	.8	.8	99.7
Souvenirs	1	.3	.3	100.0
Total	359	100.0	100.0	

4C2 - What type of service/ product do you provide in your organization-supervisor

	Frequency	Percent	Valid Percent	Cumulative Percent
	1	.3	.3	.3
Accounting / finance	1	.3	.3	.6
Advertisement	3	.8	.8	1.4
Advertising	97	27.0	27.0	28.4
Advertisement	3	.8	.8	29.2
Advertising	5	1.4	1.4	30.6
Advertising	1	.3	.3	30.9
Advertising	1	.3	.3	31.2
Advertisement	1	.3	.3	31.5
Advertising	1	.3	.3	31.8
Banner	3	.8	.8	32.6
banners	1	.3	.3	32.9
Banners	3	.8	.8	33.7
Bill board	4	1.1	1.1	34.8
Bill board	1	.3	.3	35.1
books	2	.6	.6	35.7
Books	1	.3	.3	35.9
Books brochures	2	.6	.6	36.5
branding	5	1.4	1.4	37.9
Branding	8	2.2	2.2	40.1
Branding, Printing	2	.6	.6	40.7
commercial	3	.8	.8	41.5
commercial printing	6	1.7	1.7	43.2
creative	3	.8	.8	44.0
Designing	1	.3	.3	44.3
Designing	1	.3	.3	44.6
designing	9	2.5	2.5	47.1
Designing	15	4.2	4.2	51.3
experimental marketing	1	.3	.3	51.5
General printing	1	.3	.3	51.8
General souvenirs	1	.3	.3	52.1
Graphic	2	.6	.6	52.6
Graphic designing	2	.6	.6	53.2
graphics	1	.3	.3	53.5
media	27	7.5	7.5	61.0
Media	2	.6	.6	61.6
News	23	6.4	6.4	68.0
news production	1	.3	.3	68.2
PR	19	5.3	5.3	73.5
Pre-press	1	.3	.3	73.8

Pre-press	4	1.1	1.1	74.9
prepress	2	.6	.6	75.5
Prepress	2	.6	.6	76.0
printing	20	5.6	5.6	81.6
Printing	41	11.4	11.4	93.0
Printing, designing	1	.3	.3	93.3
printing branding	1	.3	.3	93.6
printing commercial	1	.3	.3	93.9
prints	4	1.1	1.1	95.0
Prints	2	.6	.6	95.5
programing	1	.3	.3	95.8
service	3	.8	.8	96.7
Services	1	.3	.3	96.9
Souvenirs	1	.3	.3	97.2
stationary	5	1.4	1.4	98.6
television content creation	5	1.4	1.4	100.0
Total	359	100.0	100.0	

APPENDIX 4D

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.486	17.538	17.538	16.486	17.538	17.538
2	6.940	7.383	24.921			
3	6.340	6.745	31.667			
4	4.627	4.923	36.589			
5	2.723	2.897	39.486			
6	2.619	2.786	42.272			
7	2.298	2.445	44.717			
8	2.232	2.375	47.092			
9	2.058	2.190	49.282			
10	1.762	1.875	51.157			
11	1.600	1.702	52.859			
12	1.504	1.600	54.459			
13	1.417	1.508	55.967			
14	1.396	1.485	57.452			
15	1.354	1.440	58.892			
16	1.235	1.314	60.206			
17	1.178	1.253	61.459			
18	1.162	1.236	62.695			
19	1.116	1.187	63.882			
20	1.102	1.173	65.054			
21	1.045	1.112	66.166			
22	1.024	1.089	67.256			
23	.989	1.052	68.308			
24	.945	1.006	69.314			
25	.925	.984	70.298			
26	.918	.976	71.274			
27	.867	.922	72.196			
28	.834	.887	73.084			
29	.812	.864	73.948			
30	.780	.829	74.777			
31	.775	.825	75.602			
32	.745	.793	76.395			
33	.722	.768	77.162			
34	.713	.758	77.920			
35	.691	.735	78.656			
36	.662	.704	79.360			
37	.656	.698	80.058			
38	.629	.669	80.727			
39	.589	.627	81.354			
40	.583	.620	81.974			
41	.576	.613	82.587			
42	.564	.599	83.187			
43	.551	.586	83.772			
44	.537	.571	84.344			
45	.525	.559	84.903			
46	.516	.549	85.452			
47	.500	.532	85.984			
48	.488	.519	86.503			
49	.478	.508	87.012			
50	.463	.492	87.504			
51	.455	.485	87.989			

52	.428	.456	88.444			
53	.425	.452	88.896			
54	.419	.445	89.342			
55	.410	.436	89.778			
56	.407	.433	90.210			
57	.393	.418	90.629			
58	.381	.405	91.034			
59	.374	.398	91.432			
60	.368	.392	91.824			
61	.363	.386	92.209			
62	.350	.373	92.582			
63	.339	.361	92.943			
64	.333	.354	93.297			
65	.312	.332	93.629			
66	.304	.324	93.953			
67	.302	.321	94.274			
68	.287	.305	94.579			
69	.282	.300	94.879			
70	.277	.294	95.173			
71	.268	.285	95.458			
72	.264	.281	95.739			
73	.259	.276	96.015			
74	.244	.259	96.275			
75	.240	.255	96.530			
76	.237	.252	96.782			
77	.222	.236	97.017			
78	.215	.228	97.246			
79	.210	.223	97.469			
80	.206	.219	97.688			
81	.203	.216	97.904			
82	.198	.211	98.114			
83	.186	.198	98.313			
84	.177	.188	98.500			
85	.171	.181	98.682			
86	.165	.175	98.857			
87	.161	.172	99.029			
88	.151	.161	99.190			
89	.145	.154	99.344			
90	.144	.153	99.496			
91	.136	.145	99.641			
92	.121	.129	99.770			
93	.113	.120	99.891			
94	.103	.109	100.000			

Source: Field Data (2018)