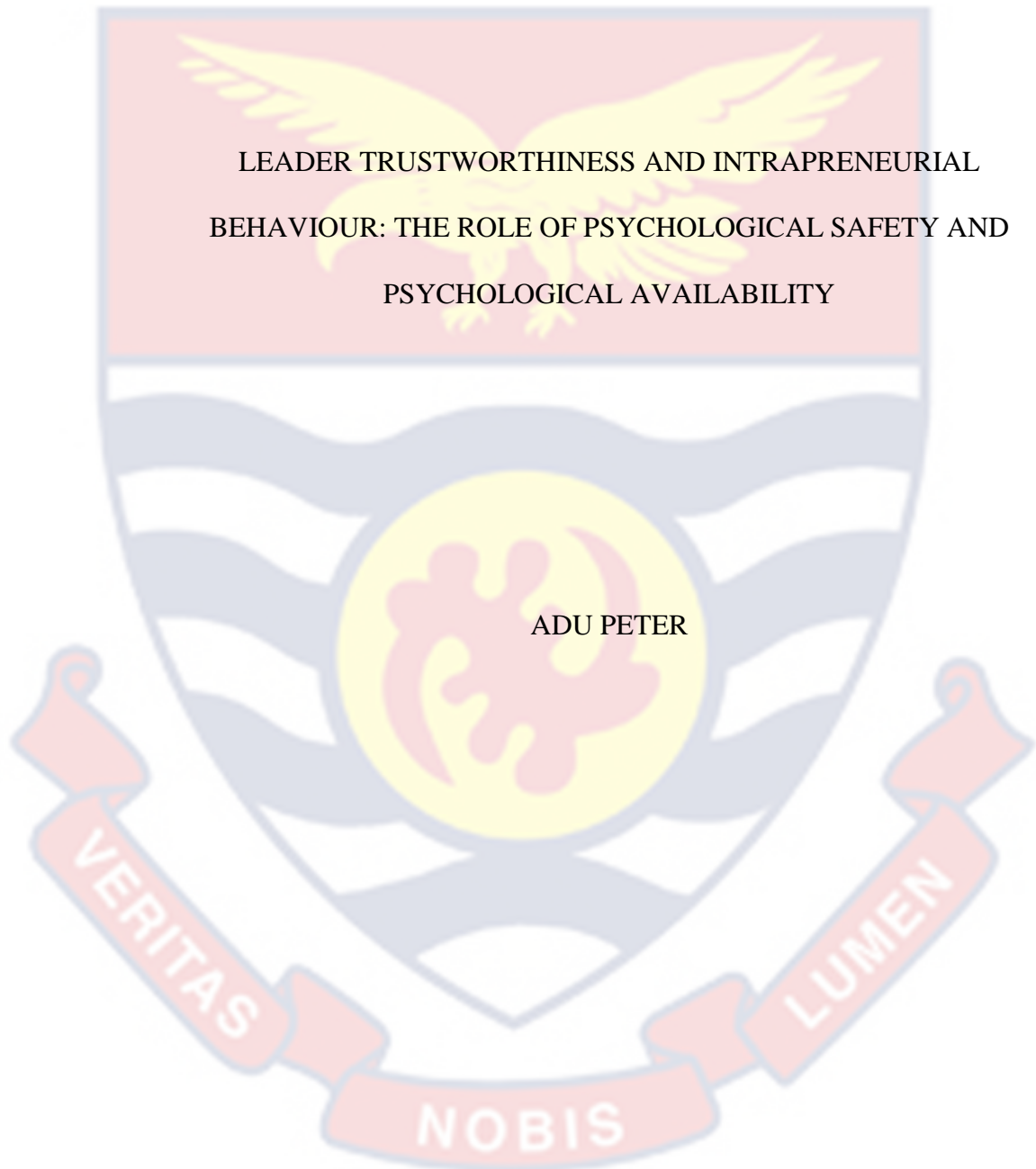


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LEADER TRUSTWORTHINESS AND INTRAPRENEURIAL
BEHAVIOUR: THE ROLE OF PSYCHOLOGICAL SAFETY AND
PSYCHOLOGICAL AVAILABILITY

BY

ADU PETER

Thesis submitted to the Department of Management of the School of Business,
College of Humanities and Legal Studies, University of Cape Coast, in partial
fulfilment of the requirements for the award of Master of Commerce degree in
Management

JUNE 2023

DECLARATION

Candidate's Declaration

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

Candidate's Signature.....Date

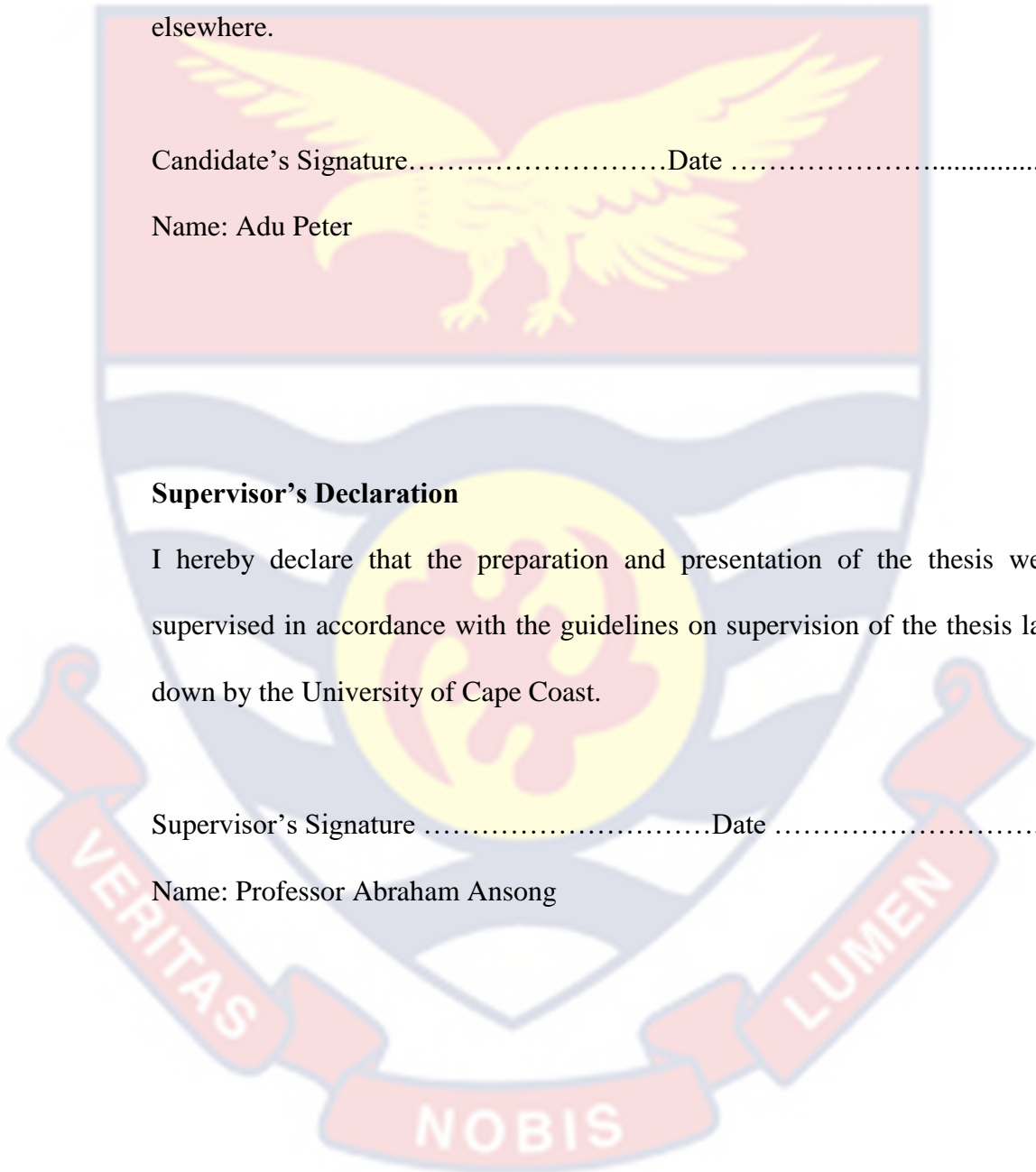
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Supervisor's Declaration

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

Supervisor's SignatureDate

Name: Professor Abraham Ansong



ABSTRACT

The main purpose of the study was to analyse the mediating effect of psychological safety and psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour among employees from the manufacturing sector. The quantitative research approach was adopted for this study. The explanatory research design was adopted. This study was conducted among manufacturing firms in Ghana. A total sample size of 291 respondents was considered. The data collection instrument for the study was a questionnaire. The study's objectives were achieved by using the structural equation model. The study found that there was no significant relationship between leaders' trustworthiness and employee intrapreneurial behaviour. Also, the study found that there was a positive and significant relationship between psychological safety and employees' intrapreneurial behaviour. The study found that there was a positive and significant relationship between the variables. The study found that there was a positive and significant relationship between leader trustworthiness and employees' psychological safety. The study found that there was a positive and significant relationship between leader trustworthiness and employee psychological availability. The study found that there was a full mediation of psychological safety on the relationship between leader trustworthiness and employee intrapreneurial behaviour. The study found that psychological availability had a full mediating role on the relationship between leader trustworthiness and intrapreneurial behaviour. The study recommended that organisations wanting to institutionalize intrapreneurship should provide substantial support and potential training to managers on how they can best support intrapreneurship.

KEY WORDS

Leader trustworthiness

Psychological safety

Psychological availability

Intrapreneurial behaviour

Structural Equation Model

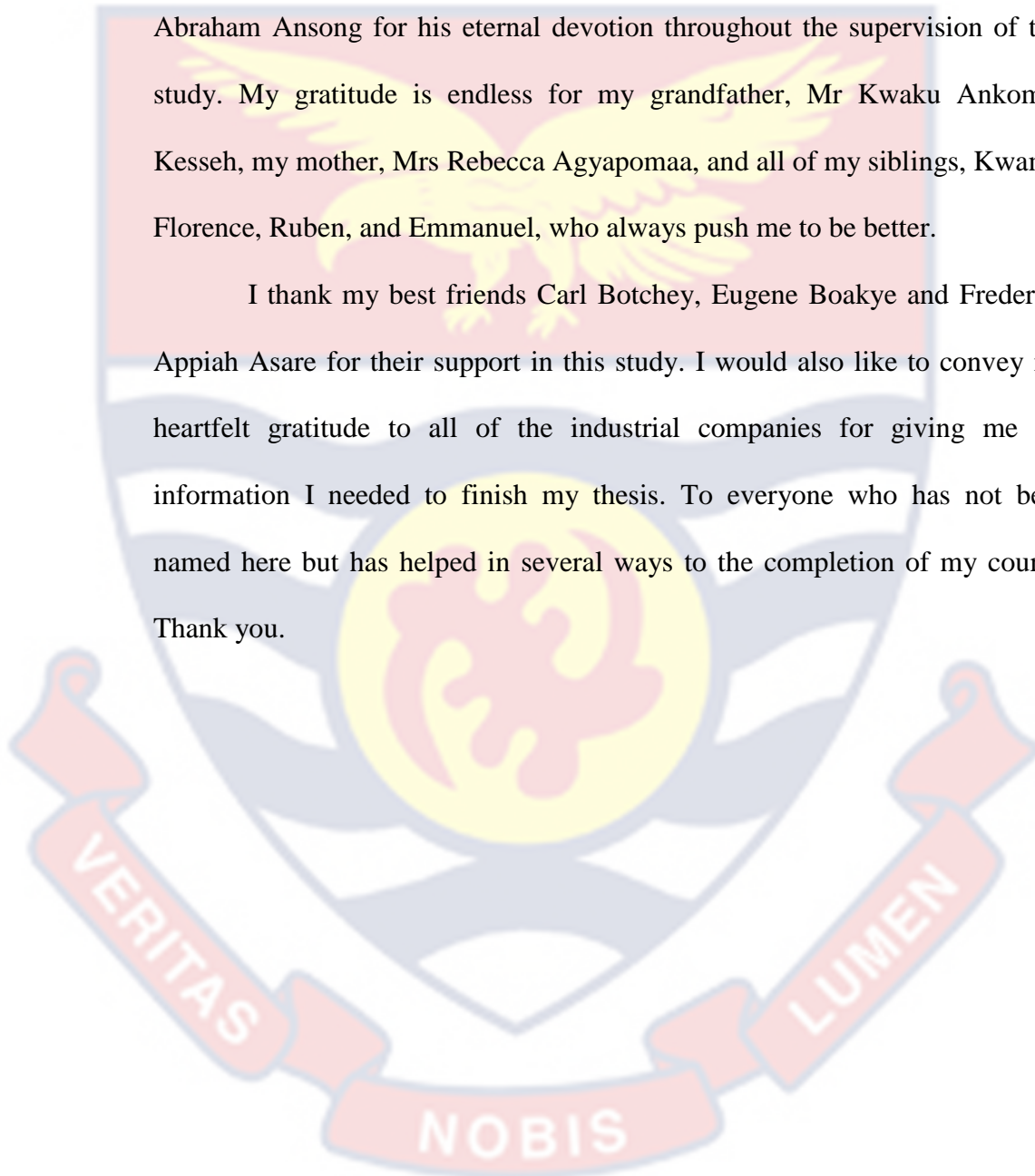
Manufacturing Sector



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DEDICATION

To Mr. (Nana) Kwaku Ankomah Kesseh, Myself, lovely mum, friends, entire family and all loved ones.



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LIST OF ABBREVIATIONS

- IB - Intrapreneurial Behaviour
LT - Leader Trustworthiness
PA - Psychological Availability
PS - Psychological Safety
SEM - Structural Equation Model



CHAPTER ONE

INTRODUCTION

The business world is constantly changing due to technological advancements, industrialisation, customer expectation, and intense competition. Business managers, owners, and leaders have no option but to adopt appropriate business strategies to react to these changing environmental issues (Festing & Harsch, 2020). Organisations are constantly seeking ways to enhance innovation, creativity, and entrepreneurial activities within their ranks. To ensure this, the level of trust that employees place in their leaders is one of the risk factors impacting their intrapreneurial behaviour. Leaders develop the organisation's general direction and ensure employees' performance at all organisational levels. Employees that believe their leader as trustworthy are more devoted to work.

Anand (2020) indicated that, employees' intrapreneurial behaviour (IB) is essential factor for generating innovative and creative ideas for the firm's sustenance whenever there is a change in the market. Employees have favourable views about their work and work environment when they trust their leaders, as stated by Vignoli, Depolo, Cifuentes, and Punnett (2018). Hence, this chapter presents readers with an introduction and the study's background, statement of the problem, research purpose, objectives and hypotheses, significance of the study, Limitations and delimitations of the study, and the organisation of the study.

Background to the Study

Employees' intrapreneurial behaviour has become a vital strategic resource in every organisation through which businesses achieve superior performance Azuyie (2020). The level of trust that employees have in their bosses is a significant element determining their intrapreneurial behaviour. Luimes (2021) stated that establishing a favourable atmosphere heavily relies on the essential factor of trustworthiness in leadership to enhance to learning and intrapreneurial behaviour, which can drive organisational growth and competitiveness. In the context of manufacturing firms in Tema, Ghana, Given the sector's importance to the country's economic development, knowing the link between leader trustworthiness and intrapreneurial behaviour is of the utmost significance. The research aimed was to study the function of psychological safety and psychological availability as mediators in establishing a connection between leader trustworthiness and intrapreneurial behaviour in manufacturing firms in Tema, Ghana.

Ultimately, this study's results have the potential to contribute to both theoretical and practical domains. Theoretically, it will expand management and organisational leaders understanding of the factors that facilitate intrapreneurial behaviour, shedding light on psychological safety and psychological availability mediating functions. Practically, the research can provide valuable insights for leaders and managers in manufacturing firms, helping them enhance trustworthiness, psychological safety, and availability to foster a culture of intrapreneurship and drive organisational success in Tema, Ghana's manufacturing sector.

According to Zahra (1995), intrapreneurship can be described as the process of initiating a fresh business endeavor within established corporations with the aim of boosting organisational profitability and strengthening the company's competitive standing. Blanka (2019) stated that employees' intrapreneurial behaviour exhibits "entrepreneurship within an already existing organisation." Also, Farrukh, Khan, Raza, and Shahzad (2021) added that intrapreneurial behaviour (IB) is an additional role behaviour of workers, which entails identifying and exploiting opportunities for organisations to progress. Employees engaging in intrapreneurial behaviour exhibit qualities such as being innovative, taking risks, and displaying proactive attitudes (Gouda & Tiwari, 2021).

Saboor, Yasmin, Paracha, and Amin (2020) posits that intrapreneurs have a critical impact in both current operational success and future operational performance, and competitive advantage of an organisation. In the manufacturing industry, the development of new goods and services requires the involvement of various stakeholders, particularly employees who directly interact with customers and comprehend their requirements and preferences (Bour, Asafo, & Kwarteng, 2019). Employees often possess a clear picture of potential prospects for change and progress, which may be more explicit and precise than what is known by top management (Nartey, 2021). Pandey, Gupta, and Hassan (2020) advanced that intrapreneurs perform necessary tasks to keep businesses sustainable. Owusu-Asiamah (2018) emphasised that intrapreneurship is critical to enhancing its growth even under serious market competition, regardless of the size or resources of the business. Alam, Nasir, and Rehman (2020) stated that intrapreneurship assists businesses in

improving internal performance, adapting to external changes, and revitalizing businesses. Schumpeter's (1934) claimed that carrying on intrapreneurship is the only fundamental function for organisations to overcome competitors. The intrapreneurs are to utilise available resources and create new commodities and services or improve an existing one.

Trust in a leader refers to the subordinate's openness to being exposed to the influence of their supervisor, who they cannot control, and who is responsible for conveying the goals and policies set by top management (Sharkie 2009). Leaders' behaviour plays an essential role in the working environment that determine employees' behaviour and work performance. Individuals' evaluation of their leaders depends on their relationship with their leaders, as noticed by Wong and Law (2017). Establishing trustworthiness is necessary for the employees to build positive and effective connections with their leaders (Newman & Ford, 2021).

Milind, Radha, Neel, and Pratik (2019), demonstrated trust could be a thought of as a mental or psychological state. where one is inclined to embrace vulnerability based on optimistic beliefs and expectations in another person. According to Agote, Aramburu, and Lines (2016), leader trustworthiness affects employees' intrapreneurial behaviours and work performance. They claim employees are likelier to obey the work instructions of leaders they can trust.

Research has shown that to improve the intrapreneurship behaviour of employees, the leader's characteristics play a significant role. Leaders are individuals who inspire and motivate their followers. According to the social exchange theory, leaders cause a change in individuals and social systems.

That is, leadership trustworthiness can enhance the intrapreneurship behaviour of an employee. Colquitt, Zipay, Lynch, and Outlaw (2018) noted that "two broad outcomes of trust are risk-taking and performance." Previous studies conducted by Lee et al. (2020) and Donkor, Dongmei, and Sekyere (2021) have indicated that when employees regard their leaders as open to their ideas, opinions, and concerns, they are more inclined to recognise the value of utilizing their creative and innovative concepts within the work environment. From the Social Exchange Theory (SET), Blau (1964) emphasised that leaders' trustworthy relationship with employees has implications on employees' relatedness. Leader trust affects their level of emotions and voicing out their concerns. The theory further suggested that the trustworthiness of a leader fosters a favourable connection between employees and their consistent job performance.

Psychological safety pertains to how employees perceive or understand a particular situation that they may take chances and offer their ideas without nervousness about unfavourable outcomes. Psychological safety constituted an essential factor in the relationship between leader trustworthiness and ensured employees' intrapreneurial behaviour. Many organisational challenges may be identified earlier by workers before management awareness because employees carry out daily activities at all levels within and outside the organisation. Psychological safety was characterised by Edmondson, Kramer, and Cook (2004) as an environment where people feel secure being (and expressing) themselves without fear. Clark (2020) pinpoint that, psychological safety refers to a state where individuals feel welcomed and secure to actively

participate, learn, and question established norms without the worry of facing humiliation, exclusion, or retribution.

According to the psychosocial safety climate theory propounded by Idris, Dollard, and Dormann (2012), Employees' tend to be practically inclined and exhibit greater creativity and innovativeness in an atmosphere that promotes psychological health, well-being, and a sense of safety. Moreover, it suggests that a secure work environment fosters a psychologically secure environment, and the conditions present workplace have a significant influence on employees' intrapreneurial behaviour.

In organisations with high psychological safety, employees usually go the extra mile in performing their work. Dollard, Leka, Potter, Keeffe, and Webber (2019), stated that leaders are to protect employees' psychological safety by developing pro-safety policies, trustworthy behaviour, training, and consistently encouraging adherence to high safety standards.

A reliable connection between workers and their supervisors lets employees feel safer while engaging in their innovative ideas because it reduces the worry of embarrassment or reprimanding when attempting and failing to implement new ideas (Woodman & Yuan, 2021). Also, establishing a positive and meaningful professional connection promotes employee well-being, feel valued and respected, increasing their impression of psychological safety and stimulating creative/ innovative behaviour.

Qasim, Usman, Ghani, and Khan (2022) stated that, leaders who demonstrate competence, goodwill, and ethical conduct have the capacity to instill trust and consequently enhance psychological safety, innovation, and employee creativity. When leaders are deemed trustworthy, employees are

more inclined to participate in intrapreneurial behaviour, perceiving the associated aids to offset the outlays. Ultimately, leader trustworthiness nurtures a culture where employees feel comfortable sharing their ideas.

In accordance with Blu's (1964) notions of social exchange theory, employees learn how to behave through social contact with others. Followers connect with leaders in the workplace and gather inputs to build cognition or thinking that influences their motivation and behaviour (Luu, 2021). In essence, followers take the initiative and govern their behaviours by the organisation's leadership style. The notion that one possesses the physical, emotional, or intellectual resources to do something is referred to as psychological availability. Leader trustworthiness constitutes an essential component that promotes employees' vigour. Thus, employees exhibit a strong willingness to invest considerable effort into their tasks and effectively fulfill their roles, even in a demanding environment. Vigour, within the context of work, represents a positive emotional state that encompasses elements of both emotions and mood, leading to a sense of physical stamina, emotional vitality, and mental alertness (Shirom, 2011).

Psychological availability, on the other hand, pertains to the leader's accessibility, approachability, and responsiveness to employees' needs, fostering a sense of support and encouragement. Employees who experience psychological availability develops more confidence and can work because they have sound mind, skills, and knowledge (Rabiul, Mohamed, Patwary, Yean & Osman 2021), which can be achieved via the establishment of trust. Employees are dedicated to their jobs, have a positive attitude, and are comfortable because of the possibilities of a safe working environment.

Individuals must therefore be passionately and psychologically motivated for the workplace. According to Kahn (1990), individuals are prone to be disengaged from their given tasks when they lack psychological availability.

Ghana's economy cannot be discussed without mentioning the manufacturing sector. It serves as a substantial contributor to foreign exchange inflows and provides employment opportunities for both skilled and unskilled job seekers, a facilitator of poor locality growth, and a significant contributor to local earnings. As reported by the Ghana Statistical Service, in 2015, the manufacturing industry made a GDP contribution of GHS28 billion (\$6.1 billion), which increased compared to GHS23.9 billion (\$5.2 billion) in 2014 and GHS20.5 billion (\$4.4 billion) in 2016 as reported by GSS. In 2017, this represented 11.7 percent of the nation's gross domestic product (GDP). Sector's contribution to GDP expanded by 9.5 percent in 2019, up from 7.9 percent in 2018 and decreased to 3.7 percent in 2020. Afriyie (2020) advocated for improved intrapreneurial behaviour anchored on trust and a state of psychological safety and availability in the sector for improved goods production and economic development.

From the above analysis, leadership trustworthiness could enhance intrapreneurship behaviour if there is psychological availability and psychological safety. Against this backdrop, the study aimed to examine the impact of leader trustworthiness on intrapreneurial behaviour, specifically focusing on the role of psychological availability and psychological safety in this relationship.

Statement of the Problem

Industrialisation is widely regarded as a key catalyst for economic growth and progress (Ajibolade & Oyewo, 2019). Ajibolade (2013) asserts that countries, particularly developing economies, have placed significant emphasis on directing their economic planning and management towards achieving growth and development through industrialisation. The manufacturing industry plays an essential role in propelling the process of industrialisation. However, in Africa, the manufacturing sectors have struggled to attain sustainable performance levels that meet desired objectives (Ayodele & Falokun, 2003).

According to Addo (2017), a majority of manufacturing companies struggle to survive, and those that manage to stay in operation face stagnation and an inability to grow. The Association of Ghana Industries (AGI) (2013) attributed the underwhelming performance to factors such as competition and technological advancements and poor interpersonal relationships between leaders and employees, leading to poor attitudes of employees towards work. Available statistics of the Annual Domestic Product from the Ghana Statistical Service (2019) recorded abysmal growth in the manufacturing sector. The sector registered a negative growth of 0.5 in 2015 and 0.8 in 2016. In 2017, the sector further declined by 0.1 and 0.2 in 2018 (Ghana Statistical Service, 2018). In 2020, the sector recorded the lowest growth rate of 3.7%.

Research practitioners (Bradley, Brown, Hamdani, Klotz & Postlethwait, 2013) also attributed the cause of these challenges, among other things, leaders' behaviour creating poor psychosocial safety climate conditions. They assert that leaders should be interested in creating a

psychologically safe climate when hiring, employing, or after employment. According to Rabiul, Patwary, Mohamed, and Rashid (2021), low supervisor trustworthiness is marked by poor employees' psychological safety and availability, negatively affecting intrapreneurial behaviour.

The existing literature has given insufficient focus to discovering the impacts of leader trustworthiness on fostering intrapreneurial behaviour. So far, only Arunga (2017) and Centem (2021) have attempted to investigate the antecedents of employees' intrapreneurial behaviour. Arunga (2017) found management support to be a significant determinant of intrapreneurship behaviour among employees in Kenya's pharmaceutical industry. Similarly, Centem (2021) evidenced that empowering leaders positively affect the act of shaping one's job and displaying intrapreneurial behaviour within the technical service industry.

It is yet to be empirically proven whether leader trustworthiness acting through the roles of psychological availability and psychological safety could promote intrapreneurial behaviour among employees in the manufacturing sectors Javed, Naqvi, Khan, Arjoon and Tayyeb (2019).

In addition, to combat these developments, organisations may need to enhanced trustworthy relationship between leaders and their employees within organisation Mckenna and Jeske (2021). The advantages of such employees' intrapreneurial behaviour: psychological safety and psychological availability however, are not well recognised. Studies examining intrapreneurial behaviours and trust in leadership in certain roles and circumstances are also limited (Neessen, Canils, Vos, & De -Jong, 2019; & Farrukh, Ying, & Mansori, 2016).

Thus, this research aims to address this gap in the existing literature by investigating the role of psychological safety and psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour, particularly in the manufacturing sectors in the Tema metropolis of Ghana.

Purpose of the Study

The study examines the role of psychological safety and psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour.

Research Objectives

Specifically, the study aimed to:

1. analyse the effect of leader's trustworthiness on employee intrapreneurial behaviour
2. determine the effect of psychological safety on employees' intrapreneurial behaviour.
3. evaluate the effect of psychological availability on employee's intrapreneurial behaviour among employees of manufacturing firms.
4. examine the effect of leader trustworthiness on employee's psychological safety.
5. analyse the effect of leader trustworthiness and employees' psychological availability.
6. analyse the mediating role of psychological safety on the relationship between leader trustworthiness and employee intrapreneurial behaviour.

7. assess the mediating role of psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour of manufacturing firms.

Research Hypotheses

H₁: Leader trustworthiness is positively related to employees' intrapreneurial behaviour.

H₂: Psychological safety is positively related to employees' intrapreneurial behaviour.

H₃: Psychological availability is positively related to employees' intrapreneurial behaviour.

H₄: Leader trustworthiness is positively related to employees' psychological safety.

H₅: Leader trustworthiness is positively related to employees' psychological availability.

H₆: Psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour.

H₇: Psychological availability mediates the relationship between leader trustworthiness and intrapreneurial behaviour.

Significance of the Study

This study is particularly significant to academicians, business strategists, practitioners, and policymakers. First, the findings of this research would enhance the existing body of knowledge base regarding the impact of leader trustworthiness on intrapreneurial behaviour, specifically in relation to the relevance and role of psychological safety and psychological availability. Secondly, as applied research, the study's results would help business

organisations, especially those that exhibit negative attitudes towards an employee with intrapreneurial behaviour, to appreciate the value of intrapreneurial capabilities in providing vast skills necessary for development. Thirdly, the study's findings and recommendations would help policy-making bodies in private and government programmes to develop strategies that will address the pressing needs of manufacturing firms regarding intrapreneurial development.

Delimitation of the Study

The study concentrates solely on companies engaged in the manufacturing sector. By delimiting the research to these particular industries, the researcher could examine the relationship between leader trustworthiness, intrapreneurial behaviour, under the unique backdrop of psychological safety and psychological availability in manufacturing organisations. This industry-specific focus allowed for a better knowledge of the dynamics and issues that may be peculiar to manufacturing organisations. Tema metropolis was chosen as the area for the study because of more manufacturing firms in the area. The Association of Ghana Industries indicated that despite the difficulties that Ghana's industrial enterprises encounter, the manufacturing companies in this area (Tema) operate at their peak performance level.

These delimitations allow for a focused examination of leader trustworthiness, intrapreneurial behaviour, psychological safety, and psychological availability within a specific geographic area, taking into account the unique characteristics, and organisational context of Tema. It is therefore vital to assess leader trustworthiness and intrapreneurial behaviour in

the manufacturing firms in Tema so that results from the study can be a spillover to other parts of manufacturing firms in Ghana.

Limitations of the Study

The researcher experienced problems while performing the study. The specific obstacles that hold value in being shared as guidance for other researchers undertaking similar studies. First, the study used quantitative approach that relies on precise measurement tools and instruments. However, errors in measurement can arise from various factors, including biases from respondents, limitations of the instruments used, or errors in data collection. These errors can influence the dependability and validity of the data, leading to inaccurate or biased results.

Also, the employment of Structural Equation Modeling (SEM) for the analysis of data relies on high-quality data, including reliable and valid measures. If the data used in the analysis are incomplete, contain measurement errors, or suffer from low reliability, the model results may be compromised. Careful attention should be given to data collection and measurement procedures to minimize these limitations. Despite this limitation, SEM remains a valuable tool for examining complex relationships and testing theoretical models.

Definition of terms

Intrapreneurs refer to skilled and empowered employees who play a pivotal role in facilitating strategic transformations and changes within organisations.

Intrapreneurial behaviour (IB) is an additional role performed by employees (Valsania et al., 2016), which is necessary to address the impact of

globalization, market fragmentation, and the need for improved organisational performance.

Intrapreneurship involves the establishment of new businesses or revitalize its products or services within existing firms with the goal of enhancing organisational profitability and ensuring the long-term sustainability of the company.

Psychological safety: Kahn (1990) defines Psychological safety is defined as the capacity to express oneself or speak up without fear of negative effects on their sense of self, position, or job.

Psychological safety: It is a setting characterised by a sense of safety and security among individuals (have safe minded) and ability to focus in their work environment without fears (Edmonson, 2018).

According to Clarke (2010), psychological safety refers to an environment where individuals feel accepted, secure, and able to learn, contribute, and challenge existing norms without the fear of embarrassment, marginalization, or punishment.

Leader trustworthiness, as defined by Tan and Tan (2000), pertains to the willingness of subordinates to expose themselves to the actions of their supervisor, recognizing that they have no control over the behaviours and decisions made by the supervisor.

Psychological availability: The availability of an employee's physical, emotional, or intellectual resources is referred to as psychological availability.

Organisation of the Study

The structure of this study contained five chapters. The first chapter provides a comprehensive introduction to the study. In the second chapter,

relevant literature review and conceptual framework by renowned scholars and researchers are discussed. The third chapter outlines the steps, tools, and procedures employed. In order to tackle the research questions, data collection was carried out. The findings of the study, along with the analysis and discussion of the data collected from the field, are presented in the fourth chapter. Finally, the fifth and final chapter encapsulates the findings, conclusions, and a summary of recommendations.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter looked at the various concepts relating to intrapreneurial behaviour, leader trustworthiness, psychological safety, and psychological availability, and how they impact each other. Literature was organised from three perspectives. The first section looked at the theoretical review, which examined theories used to underpin the study. The second section then discusses concepts relating to intrapreneurial behaviour, leader trustworthiness, psychological safety, and psychological availability and their relationships, as well as the development of hypotheses in this section. The third section consists of a conceptual framework designed to guide the study.

Theoretical review

In this section, the study delves into the theories that form the foundation of the research. Specifically, the social exchange theory and psychosocial safety climate theory are analysed.

Social Exchange theory

Social exchange theory emphasised on assumption that the relationship between leader and employees serves as a reciprocation Blau (1964).

Social exchange theory is about the exchange of activities or benefits between two groups of people that lead to a mutually contingent and rewarding relationship (Ngure, 2016). The theory posits that employees experience an overwhelming sense of duty to return the favour to the organisation for the resources and support they receive, leading to their active engagement and commitment (Sahni, 2021). Blau (1964) adds that through social exchange,

employees learn how to behave because of social contacts with others. Social exchange shows reciprocity as an important factor in the relationship between organisations through its agents and employees, leading to positive outcomes for both parties (Boccoli et al. 2022).

It was widely recognised that employees derive several benefits from trustworthy leaders. Because of this, it is argued that employees experience good psychological emotions of safety and availability, resulting in make them obligated and empowered to exhibit positive employee behaviours such as being intrapreneurial.

Implications of Social Exchange theory to the study

The social exchange theory sheds insight on how workers analysed and respond to their leaders' relationships and behaviours. The employees have a higher chance of becoming psychologically and emotionally engaged when they are trusted by their leaders Zeng, Zhao, and Zhao (2020). The social context of the cooperation shapes the connection between them. From this perspective, employees will probably reciprocate the leader's trustworthiness by exhibiting robust dedication and exhibiting intrapreneurial behaviour at work. Trust is central to developing long-time relational exchanges among personnel and their supervisors in an organisation Lee, Kang, Kim, and Yang (2022). The (SET) principle is that the connection is primarily based on reciprocation. Thus, trustworthiness is essential in ensuring employees' psychological safety and exhibiting intrapreneurial behaviour. When employees possess psychological availability, they experience a positive outlook, self-assurance, and a sense of fulfillment Bakker (2022). Their belief in their capabilities serves as a motivating factor, encouraging them to

embrace new experiences and take risks without being hindered by the fear of potential failures.

The theory also indicates that the vulnerability to leaders' actions develops employees' confidence, cognitive assessment, and risk-taking.

Employees' confidence in the leader is related to their favourable anticipation of the leader's trustworthiness which enhanced employees' psychological safety and psychological availability to promote their intrapreneurial behaviour. Leaders' actions encourage their workers' willingness.

Psychosocial Safety Climate Theory

The theory of psychosocial safety climate, developed by Idris, Dollard, Coward, and Dormann (2012), posits that a psychosocial safety climate refers to the organisational atmosphere that fosters the psychological availability, well-being, and safety of employees. The psychosocial safety climate is predicted by organisational procedures, practices, and policies meant to protect employees' psychological availability and psychological safety. The psychosocial safety climate is also indicative of the dedication of top management, organisational involvement, and overall consultation concerning stress and accident prevention at the workplace (Bakker & Dollard, 2010). Unsafe work environments and conditions cause a poor psychological safety climate in the workplace Nguyen, Teo, Grover, and Nguyen (2017).

Employees regard their leaders, as organisational representatives. When employees perceive that quality relationships subsist between them and their leaders, they tend to behave well Elsaied (2019). A relationship of trust and mutual respect enables employees to put out their best attitudes and

performance at the workplace Baafi, Ansong, Dogbey, and Owusu (2021). The more employees receive leaders' support through empowerment, the more likely they will have a good relationship with their leaders hence employees becomes emotionally bonded with their intrapreneurial behaviour (IB) in the organisation.

Psychosocial safety climate theory further contributed that trust promotes employees' affection, personal respect and loyalty when there is a high-quality collaboration between leadership and employees. Leader's trustworthy connections inspire workers to participate in additional behaviours that strengthen those positive ties because the behaviour of employees is influenced by the benefits that they anticipate to obtain through their leader's behaviour Nazir, Qun, Hui and Shafi (2018).

Leaders have the discretion to offer an assortment of resources, like social support, autonomy, and openness to employees to reduce work-related stress to enhance their psychological health and efficiency (Hall, Daneke & Lenox, 2010). Therefore, the psychosocial safety climate theory is critical to assist organisations in coming up with better procedures, practices, and policies to protect employees' psychological safety, psychological availability, and intrapreneurial behaviour.

Implications of Psychosocial Safety Climate theory to the study

This theory postulates that leader trustworthiness helps create a safe environment to enhance employees' psychological safety and availability to nurture intrapreneurship. A safe work climate also leads to high job satisfaction among employees Taheri, Miah and Kamaruzzaman (2020). It also postulates that the provision of resources, organisational culture, top

management commitment practices, and employee consultation contribute to less stress and occupational hazards at the workplace Kurniawaty, Ramly, and Ramlawati (2019). The theory generally sees organisations' management as mainly responsible for ensuring a positive organisational safety climate.

It is feasible for people to exchange information that helps to improve psychological safety in a supportive workplace Edmondson (2001). Employees are better equipped to comprehend the boundaries of proper conduct when they feel comfortable Ferguson (2018). It is different when the work environment is unpredictable, ambiguous, and even threatens the employee. The employee will feel down and experience emotional disturbances, and this can ultimately affect the person's physical and psychological resilience, interfering with work efficiency and possibly even resulting in IB in employees if left unchecked.

Therefore, the relevant of this theory to the study specified when employees perceive their supervisors in such a way that to be trustworthy, their level of confidence aroused, and they are ready to be dependable and commit to assigned duties. This also contributes to employees to gain high level of psychological safety and psychological availability and intrapreneurial behaviour.

Conceptual Reviews

This section delves into the study's primary variables and concepts. The focus of the review centers on the relevant and related literature in the connection between, psychological safety, psychological availability, leader trustworthiness and intrapreneurial behaviour.

Leader trustworthiness (LT)

Leader trustworthiness is described generically as a psychological condition to consent vulnerabilities based on favourable assumptions of the motives and behaviours of others (Park, & Kim, 2012). In leader interactions, trust in the supervisor refers to employees' favourable expectations of the leader's competency, dependability, and compassion (Castanelli, Weller, Molloy, & Bearman, 2022). The relationship of trust is made out of common trust between leaders and staff. When employees trust the top leader, they will likely adopt strategies and exhibit various performance behaviours.

An organisation with a low trust relationship between employees and leaders causes the organisation to have decreased productivity, less contentment among their workers, and even staff turnover intention (Fulmer & Ostroff, 2017). The establishment of trust relationships with employees brings a beneficial influence on employee job satisfaction in an organisation (Pan & Wei, 2009). Leader trust boosts employees' cooperation with management. The primary respect for employees will enable them to develop physically and mentally sound. Therefore, the employees-leader trust relationships build the high-level core of job satisfaction with employees to have a full work engagement and commitment in their workplace.

Employees who believe that their management trusts their abilities to finish a task and they are more inclined to put their ultimate responsibility on to satisfy their leader's requirements (Reed, 2022). Therefore, the employees' trust effectively helped to increase job performance in an organisation. Leaders have a crucial role in channelling organisational influence to employees, in the perceptions of workers, the regularity and individual nature of interactions between supervisors and subordinates establish leaders as sources of organisational fairness. Employees interpret leaders' behaviours based on explicit communication exchanges. Subsequently, employees mentally analyze this information, leading to an evaluation of trust in their supervisor. Enhanced trust in leaders strengthens these relationships, ultimately boosting job satisfaction.

Intrapreneurial Behaviour (IB)

Pinchot (1985) introduced intrapreneurship as a concept. Pinchot coined the concept as the notion of fostering entrepreneurial endeavors within established organisations. According to Hisrich (1990) intrapreneurs are "the visionaries who do." Those who are direct concern with creating and innovating a product or service within a company.

Research practitioners define intrapreneurship in various means. Intrapreneurial behaviour refers to the actions taken by employees that extend beyond their assigned responsibilities, with the aim of advancing the organisation they are employed in (Antoncic & Hisrich, 2003; Caniels, Jong & Vos, 2021). Additionally, Hiwarkar (2019) defined intrapreneurship as the establishment of new ventures into established businesses to improve organisational profitability and competitiveness position, or to strategically

revitalize existing business operations. Intrapreneurship involves the generation of fresh business prospects through redefining the firm's products or services, as well as developing new markets.

In addition, intrapreneurial behaviour (IB) can be regarded as a voluntary behaviour exhibited by employees to explore fresh opportunities and generate innovative ideas described as entrepreneurship within an existing organisation (Bergman & Williamsson, 2020). According to Lizote, Lana, and Verdinelli (2015), intrapreneurship involves a process wherein employees actively seek out opportunities, irrespective of their existing resources. Intrapreneurship involves creating new products and business lines (Shakra, 2021). Besides, Afriyie (2020) addressed that intrapreneurship is the employees' spirit of entrepreneurship within the existing organisation. According to Basso (2010), intrapreneurship is a dynamic process of entrepreneurship that occurs within existing businesses. It involves the attitudes of employees who have entrepreneurial tendencies are conducive to the formation of fresh company ideas as well such as proactivity, autonomy, and creativity. Consequently, intrapreneurship is defined as a self-driven strategic activity pursued by operational-level personnel who seek opportunities beyond the scope defined by management.

The employees' intrapreneurial behaviour (IB) is recognised as a vital means of growth and gaining a substantial competitive advantage, as stated by Carter and Tamayo (2017). IB is crucial for organisations' growth and competitive advantage irrespective of size. Intrapreneurs are a source of financial growth and profitability and are vital for businesses to stay competitive in a rapidly changing market. Employees must have

intrapreneurial abilities to improve the designing of goods and services based on client needs (Yuan et al., 2021).

Kristiansen (2019) discovered three major elements of intrapreneurship/intrapreneurial behaviour: creativity, innovativeness, risk-taking, and proactiveness. Creative work is individual behaviour aimed at the beginning and introduction of new and valuable ideas, strategies, or products. This inventive behaviour, as per the research conducted by De-Jong and Den Hartog (2018) manifests itself in four ways: concept exploration, idea development, idea advocacy, and idea execution. Innovativeness refers to the act of initiating fresh and original ideas, as well as creative processes that diverge from existing practices (Linton, 2019). Business leaders may improve their companies' business models to deliver value to customers and generate profits for their companies. New goods and procedures are not always the result of innovation. Companies might innovate by identifying alternative business approaches, creating new internal tools, modifying corporate procedures, or redesigning the business model. According to (March & Shapira, 1983; & Guo & Jiang, 2020), risk-taking entails the desire to invest in initiatives that have uncertain outcomes. It is recognised that greater levels of risk-taking are typically related through the potential for superior returns. They posited that it is an employee trait to try new ways of working and introduce creative products or services for implementation. Proactiveness refers to employees' propensity to adopt strategies within their available resources. Employees who act in anticipation of possible challenges exhibit this trait. It also provides a chance to encourage employee behaviour aligned

with the future desires and requirements of the organisation concerning its competitors.

Psychological Safety (PS)

Psychological safety is essential in actual work performance and provides a safe environment for workers. Psychological safety refers to employees having a safe minded and stay focus at work environment and enable them free to communicate their concerns without fear of repercussions or condemnation. Kahn (1990) defined psychological safety is the notion that employees may freely express their emotions and engage in participation without worrying about detrimental effects on their self-perception, social standing, or job performance. The notion also refers to an individual's expectation of how others will react when he or she proposes a creative idea, solicits comments, asks questions, or reports a mistake.

An individual assesses the relational repercussions (thus if individuals within the organisation would embarrass or threaten the person who initiated the new or creative ideas). Edmondson (1999) considered psychological safety as the opportunity to express and involve without dread of oneself of repercussions to one's personality, status, or career. Employees who actively share their opinions with their leaders need not fear repercussions. Psychological safety thus describes employees' means of communicating freely and honestly with their leaders or others in an organisation.

Clarke's (2010) stated four Stages of Psychological Safety framework that have contribute to psychological safety of employees. Psychological safety, according to him is a state where individuals perceive a feeling of security and freedom to learn, participate, and challenge the established quo.

Psychological Availability (PA)

Psychological availability defines an individual's preparedness to wholeheartedly commit and use their actual, emotional, and thought abilities in fulfilling their job responsibilities (Kahn, 1990). It is affected by one's confidence in their professional skills and their position within the company (Rich et al., 2019). Additionally, the state of psychological availability is influenced by the emotional and physical resources one possesses for investment in their performance, as well as the trust in the organisation its values, and goals (Kahn, 1990).

Essentially, it evaluates an individual's preparedness and self-assurance to actively participate in their work role. Psychological availability encompasses possessing the requisite physical, emotional, or mental resources for active involvement in a specific activity when required (Gatti, 2016). Individuals who experience psychological availability are capable of managing and dedicating investing their physical, intellectual, and emotional energies to meet the requirements of their role responsibilities. Doku, Rawat, and Chaudhary (2020) defined psychological availability as the feeling of personal involvement the workplace that makes people feel that they are an integral part of the work environment. Psychological availability is a basic human need that significantly influences emotional behaviours and cognitive functions such as learning and concentration (Antwi et al., 2019). When employees lack self-belonging, it lowers their self-esteem, increases tension and anxiety, and reduces satisfaction.

Moreover, Mao, Liu, Zhang, Liao, and Hao (2020), Psychological Availability (PA) pertains in terms of emotional, bodily, and mental wellness

characteristics of a person necessary for uninterrupted job performance at any given time. Psychological availability, then, depends on the physiological, emotional, and cognitive resources people require to complete their tasks.

Empirical Review

Leader trustworthiness and intrapreneurial behaviours

Leader trustworthiness is a fundamental bedrock that underpins employees' intrapreneurial behaviour. It affects the feeling of affiliation experienced by employees and capability in their jobs. Liu et al. (2016) stated that employees would not be eager to participate in creative and innovative activities if they recognised that their leaders were untrustworthy. Leaders' dishonest behaviour deliberately restricts how employees' intrapreneurial behaviour can be fostered within an organisation. Li and Yan (2009) studied the influence of leader trust on employees' intrapreneurship in Chinese commercial banks. It was concluded that workers supervised by a trustworthy leader often exhibit better confidence in their ability to accomplish their duties, positively affecting their intrapreneurial behaviour. Trust in a supervisor allows workers to develop themselves by fostering a workplace that encourages safe self-expression and builds self-assurance while performing.

Stull and Aram (2010) studied trust as a driver of intrapreneurship. The study implied that leader trust has a substantial and direct impact on ensuring intrapreneurial behaviour. According to Gupta and Hershey (2019), trustworthy leaders promote organisational success and employees' intrapreneurial behaviour at work, contributing to high firm performance. Wohlgemuth et al. (2019) found that trust in managers (leaders) increases employee involvement in decision-making. The study also found that leader

trustworthiness increases interconnectivity and fosters intrapreneurial employee behaviour. They stated that employees would feel the desire to share their challenges at work, express their innovative ideas, and develop a sense of tackling issues that confront them at work. Rigtering and Weitzel (2022) focused on work context as an antecedent for intrapreneurship. The findings from structural equation model estimations show that trust in a direct leader positively influences employees' intrapreneurial behaviour.

Also, Peng (2020) studied whether organisational culture and managers' trustworthiness engender intrapreneurial behaviour. It was concluded that managers' trustworthiness significantly impacts how much staff creativity is fostered. They suggested that encouraging employee intrapreneurial behaviour depends on managers showing a sufficient level of benevolence and integrity. Kumar and Parveen (2021) conducted a study to assess the factors that enable employees' intrapreneurial behaviour. The research indicated that leaders' support had a favourable and substantial impact on intrapreneurial behaviours among the employees.

Fulmer and Ostroff (2017) indicated that trustworthiness is essential in a leader's ability to inspire employees. They asserted that the value of trust in leadership indicates their intrapreneurial behaviour on how employees' cope with high-risk situations and shifting business trends. They also contributed that leader trust influences leader-employee collaboration, job satisfaction, communication, information sharing, teamwork, organisational commitment, and employee turnover.

Furthermore, Farrukh et al. (2021) study looked at how to foster employee organisational trust during an organisational change. It was

identified that keeping a trustworthy relationship with employees is a critical duty for leaders who encourage staff to think creatively and innovatively to take advantage of the transformative potential. Sharkie (2009) conducted a study examining employee performance and highlighted the relevance of leader trust in fostering workers' performance. In accordance with the findings of the survey, the interaction amongst employers and employees is beneficial. Influences employees' participation in extra-role behaviours that go beyond their legal and contractual obligations. Obuobisa-Darko (2019) investigated the determinants of trust and the consequences of trust on employee performance. It was discovered that employees had low trust in the organisation because they were not substantially involved in decision-making, it was difficult to pinpoint their intrapreneurial ideas. Managers were advised to create trust in their employees by delegating duties and minimising criticisms of their performance standards. It was proposed that if managers and employees have a consistently a great amount of trust, it will intend to improve employees' level of enthusiasm for their work.

Kumar and Dhar (2017) examined how trust in leaders influences employee creativity. The study emphasized that individuals under the supervision of trustworthy leaders acquire safe cognitive and emotive growth, which improves intrapreneurial behaviour.

Shakie (2009) argued that the trust behaviour of a leader is deemed crucial in influencing employee performance. The researcher asserted that if employers require their staff to perform beyond their expectations, building trust is essential to fostering this success. The author fascinates that trust is essential in promoting employee extra-role action beyond their legal and

contractual responsibility of what is demanded from them. Novitasari, Supriatna, Asbari, and Nugroho (2021) analysed the influence of dependable leaders among workers in Indonesia's industrial sector on staffs intrapreneurial behaviour. According to the study, trustworthiness of a leader positively and significantly impacts psychological safety and employee intrapreneurial behaviour.

Karpin (2019) suggests that employees exchange their ideas with their leaders to increase their skills and experience. Employee assessments of the degree of support provided to them by management have a significant impact on their loyalty to the company and readiness to participate in discretionary extra-curricular pursuits. How employees see managers' values, moral character, generosity, and overall reliability enhances trust in the employer-employee relationship. Bilal, Ahmad, Jan, Ragif and Huseynov (2021) studied transformational leadership. Based on conclusion of the researchers, transformative leadership by females promotes trust, associated, and innovative behaviour among employees. In line with the findings of the research, leaders' behaviour plays an essential role in encouragement workers to act in ways that reciprocate the trust and encourage intrapreneurial behaviour in staffs. Therefore this study hypothesised that;

H₁: Leader trustworthiness is positively related to employees' intrapreneurial behaviour.

Psychological safety and intrapreneurial behaviour

Intrapreneurial behaviour entails offering innovative ideas, experimenting with various work techniques, or challenging the existing state of affairs, which may entail uncertainty and willingness to take risks (Yuan & Woodman, 2010; Muhammad, Chong & Shaheen, 2016). To promote employee intrapreneurial behaviour, it is very vital to fully understand those factors that create a sense of comfort and fearlessness among workers, allowing them to actively participate in proactive, actions that are creative and inventive in the workplace. This sense of security and absence of threats in working environment is referred to as psychological safety. The notice of psychological safety enable people to engage in activities and connections that foster good growth and inspire prosocial behaviour (Wanless, 2016).

Gilson and Shalley (2004) stipulated that, fostering innovation among employees can be achieved by creating a supportive environment that encourages the generation of new ideas, sharing of information, and embracing risk-taking. Alzyoud (2019) suggests that psychological safety serves as a protective barrier that alleviates workers' concerns about potential negative judgments from others, thus motivating them to propose new ideas, question the current situation, and actively involved in intrapreneurial activities (Carmeli et al., 2010). Moreover, Kessel et al. (2012) investigated the connections between creativity among staff members and psychological safety within the healthcare industry in Germany. Research conducted discovered that psychological safety enhanced information sharing and the exchange of expertise, leading to improved creative performance.

In Nigeria, Ahmad, Mahmoud, and Posspowijoyo (2021) carried out a research to investigate the connection between psychological safety (PS) and its impact on individual intrapreneurial behaviour (IB). The researchers discovered that when employees are in an environment that allows them to freely express and implement new ideas without regard for the repercussions to their personal reputation, position, or career, they are more likely to engage in IB. To foster IB among employees, organisations should provide the necessary support and autonomy for employees to develop innovative ideas. PS serves as a motivator for employees to participate in risky and creative endeavors. It instills a sense of vigour and power an individual's involvement to creative work. Consequently, employees become more proactive, display greater creativity, when they encounter a favourable PS atmosphere, they make useful suggestions which serves as a critical foundation for fostering creativity.

In addition, Alzyoud, (2019) examined the value of psychological safety and creativity among employees in a hospitality enterprise. The study found that employees become psychologically and intrapreneurial inclined when they are provided with clarity of roles. Providing employees with a clear awareness of what they are expected to perform, is been considered a way to increase psychological safety. Gaining a comprehensive understanding of job responsibilities can play an important impact in reducing uncertainty and alleviating the fear associated with making decisions in workplaces. This, in turn, adds to enhancing employee psychological safety. Creating a psychologically safe environment is crucial for fostering intrapreneurial behaviour (IB).

Atatsi, Edem, Azila-Gbettor and Mensah (2021) analyse the mechanism for strengthening workers' job performance through. The researchers found that when the well-being of employees is given priority, it significantly enhances the sense of belongingness among nurses within the organisation. Consequently, this improves the accomplishment of their duties. The passionate emotions of nurses encourage them personally encompass themselves towards their organisations and occupations. Thus, allowing individuals to seek to retain, keep and strengthen their thoughts for the organisation and the job by demonstrating superior performance encourage inventive work behaviour.

Fjermedal (2020) supports the view that employee intrapreneurial behaviour depends greatly on the psychological safety. Such that when employees' are psychologically safe at work, it serves as a resource that plays a crucial role that helps workers an ample opportunities to be more proactive, express their thoughts and problems influencing them at work.

Marijke, Okyireh, Siddique, and Owusu-Okyireh (2021) assessed the impact of psychological safety on intrapreneurial behaviour. Researchers found a strong positive and direct association connecting psychological safety and intrapreneurial behaviour. According to the study, employees become capable of their jobs, self-determined, and more engaged in creativity when they are psychologically safe. They observed that when organisations encourage their members to do additional activities beyond their primary responsibilities, it helps to improve their skills for the organisation's benefit.

When a worker enjoys an environment that enables them to exhibit and apply innovations with no apprehension and unfavourable implications, an

employee will be more likely to participate in IB. Hence if it is related to their reputation, a position of power or a profession. In support of Blau (1964) social exchange theory (SET), indicates that providing a psychologically safe atmosphere is consequently important for employees to nurture intrapreneurial behaviour. PS stimulates a sense of vigour and impacts a person's contribution to creative activity. When there is a favourable PS atmosphere, employees are more proactive, innovative, and provide more constructive suggestions. PS is a crucial basis for IB. Therefore, this study hypothesised that:

H₂: Psychological safety is positively related to employees' intrapreneurial behaviour.

Psychological availability and intrapreneurial behaviour

Psychologically available entails individuals safe minded and engage physically in activities, whether they are working alone or with others. Employees' become logically and empathically to express their thoughts and develop their skills at work which enhances their intrapreneurial behaviour. Wang et al. (2021) investigated the role of psychological availability among employees. They concluded that the more an employee is psychologically available at work, the bigger the physical, emotional, and cognitive resources that they mobilised. Workers devote more time and attention to activities outside of their workplace. The study also confirmed that paying attention to employees' job security increases their mental resources and ability to concentrate on their job performance. This suggests that workers need to be protected from internal or external distractions for them to engage in proactive endeavours and cognitive resources (generating ideas), psychological resources, and other resources necessary for individual intrapreneurs.

In Nigeria, Christian, Oguegbe, and Ogbonnaya (2019) investigated the role of psychological availability in predicting innovative behaviour among the administrative staff of the Federal Teaching Hospital. The findings of their study revealed a significant relationship between psychological availability and innovative behaviour at work. The study indicated that employees who are psychologically available possess a heightened sense of awareness and are able to reassess potential challenges and their work environment, leading to the generation of innovative ideas. Furthermore, the study emphasized that psychological availability serves as a valuable personal resource that enhances overall engagement in the workplace. Gawke, Gorgievski and Bakker (2017) study found that employees become psychologically available when they are motivated and less prone to getting sidetracked, and wholly immersed in intrapreneurial behaviour.

Bell, Khan, and Quratulain (2022) contributed that lack of psychological availability reduces workers dedication to perform extraordinary due to work overloads. In the work setting, the greater the employee's psychological availability the better-off the physical, additional energy, emotional and intellectual resources a personal gain. If an individual perceives a work environment to be overly demanding, he or she may be distractive or even a lack of control in their job participate in less proactive work behaviours.

A study conducted by Hunter, Farr, Heinen, Allen (2019) observed that psychological availability was significantly and positively related to innovative behaviour in the workplace. They asserted that psychological availability induces a favourable mental disposition that supports idea

generation and idea implementation. Kim et al. (2020) observed that psychological availability promotes knowledge sharing among employees. They proposed that employees who demonstrate psychological availability have both the physical resources to help others and the cognitive capacity to produce new ideas. The researchers noted that the act of sharing information involves tangible and intangible costs and risks for those who choose to share ideas, so one has to make an additional effort to participate in such practises. This study hypothesised that;

H₃: Psychological availability is positively related to employees' intrapreneurial behaviour.

Leader trustworthiness and psychological Safety

The interaction between a leader and an employee directly influences the employee's perception of psychological safety within the workplace. When employees perceive their superiors as trustworthy, their psychological safety is enhanced. The primary obstacle to achieving psychological safety is the lack of confidence in the positive outcomes of self-expression (Mather, 2020). According to Bligh (2017), an immediate outcome of trust is that it imbues trustors with the assurance of being able to predict the behaviours of trustees. Consequently, when employees trust their supervisors, they experience reduced uncertainty given the framework of the workplace's social environment, which is a significant source of psychological safety. As supervisors hold significant power in work environments, the significance of trust in supervisors lies in its influential role in shaping the psychological safety felt by employees. Trust allows trustors to develop positive expectations

regarding the actions, inherent virtues, or intentions of trustees (Li & Tan, 2013).

Kundi and Aboramadan (2022) concluded that employees' psychological safety serves as a resource which can be attained when they find their managers trustworthy. This fosters employees' identification and enhances a joyful working atmosphere that ensures employees' safety minded. They also emphasised that employees' satisfaction at work promotes psychological and emotional resources at work through trustworthy relationships. These contribute that leader trustworthiness has a substantial impact on individual work attitudes, creates a safe workplace which constitutes employees' psychological safety.

Holmes and Rempel (2015) observed that trustworthiness was positively related to the psychological safety of employees. They observed that leader trustworthiness provides employees with confidence, which alleviates the fear of being misused by the leader, or their personal image being undermined. Trust in the supervisor acts as a mitigating factor against the inherent threats present in the societies and workplaces, thereby reinforcing employees' psychological safety (Li & Yan, 2009). This implies that when leaders demonstrate trustworthy attributes, such as consistent behaviour, open communication, behavioural integrity, and genuine concern for others, eliminates any mental barriers of employees which promotes psychological safety (Tchouchu, 2017). Agarwal and Farndale (2017) observed that employees interpret a leader's trustworthy behaviour as an effort to promote their personal and professional growth, which consequently increases their psychological safety.

Giles (2016) contributed that, if leaders are approachable, transparent, and reliable, their employees will feel safe and encouraged to openly discuss and implement new ideas and deprived of any apprehension. They projected that proactive employees oversee and come out with predicted suggestions to overcome challenges within an organisation. When employees can freely express their thoughts and ideas without fearing negative consequences, they experience psychological safety. Consequently, the presence of a psychologically safe environment becomes crucial in shaping positive perceptions of the organisation. In Pakistan's financial services sector, the presence of psychological safety has been found to foster greater employee participation in innovative work.

Basit (2017) determined whether leader trustworthiness promotes employees' psychological safety. The study concluded that leader trustworthiness fosters a reciprocal connection with employees, giving them an overwhelming feeling of belonging and liberation. Employees having control and access to needed resources within an organisation setting inculcates employees' cognitive safety at work. Therefore, workers reciprocate in the form of good work done and the robustness of the leader-follower connection that contributes to psychologically safe in the corporate setting.

Also, Osei-Kwame, and Amaniampong (2017) studied how psychological safety and trust in leaders affect employees' sense of job obligation among Ghanaian nurses. Findings suggest that leaders can boost employee performance when they demonstrate trustworthy behaviours by giving employees having a distinct vision, promoting collaboration, and involving them in decision-making processes can positively affect employees'

psychological safety. Eggers (2011) discovered that regular, open, and honest communication between supervisors and their subordinates is critical aspect of the establishment of confidence in employees. In this regard, workers become more inclined to trust managers that have open ways of communicating. The author further contributed that leaders who are transparent in the settlement of disputes among employees generate a climate of psychological safety. That is employees become engaged and can discuss their concerns without fear of severe response. Leaders increase employees' psychological safety and emotional commitment and in turn, develop trust and the feeling of employees when they are open and unbiased when judging or engaging with their employees.

Aranzamendez, James, and Toms (2015) study sought to analyse psychological safety conditions among employees in the healthcare sectors in Malaysia. The authors suggest that leader trustworthiness serves as a key contextual influence in establishing a psychologically safe environment. This investigation demonstrated certain leadership attributes such as leadership openness, trustworthiness, change-orientation, and ethical leadership cultivates a work environment that prioritizes psychological safety. The research also found that when employees form a robust and positive emotional connection with their leaders, it motivates them to freely share information in a manner without fear of recriminations from their leaders.

Ko and Hur (2014) study also revealed that low trustworthiness in leaders deprived employees' level of focus at work. Leaders become untrustworthy in the view of their subordinates when they abuse their employees and fail to satisfy their needed resources in performing their tasks.

Under the supervision of such leaders, employees experience heightened anxiety and are less motivated to engage actively in their work. The outcomes of low trust levels are significant in terms of reduced employee commitment and involvement. The consequences of low trust in leaders contributes workers to quit their job. In support of psychosocial climate theory Dollard et al. (2012) indicate that providing a safe workplace for employees enhances their safety minded at work. This constitutes that, when employees feel trusted, it promotes their emotional capabilities. This study, therefore, hypothesised that:

H₄: Leader trustworthiness is positively related to employees' psychological safety.

Leader trustworthiness and psychological availability

The sense that one possesses the requisite emotional, physical, and mental capabilities to properly do one's work is referred to as psychological availability (Kahn, 1990). It encompasses the level of comfort individuals feel in handling both the technical and interpersonal components of their job responsibilities.

A study conducted by Bedarkar, and Pandita (2014) revealed that trust was positively related to the psychological availability of employees of commercial banks located in mid-eastern China. They asserted that leader trustworthiness increases the confidence of employees since trust reduces concern for social uncertainty and interpersonal risk. Thus, trust in leaders eliminates the feeling of uncertainty, which may cause distraction among employees.

According to Liu, Fuller, Hester, Bennett, and Dickerson (2017) a trustworthy leader creates a unique atmosphere in the workplace which makes workers feel psychologically available. They argued that trust establishes a nurturing environment that encourages individuals to exhibit care and consideration for others in a highly proficient manner. This type of environment cultivates an awareness of psychological availability among persons, allowing them to adopt a focused mindset and direct their efforts and energy towards engaging in a specific task. Ramati-Navon, Carmeli, and Menahem (2022) asserted that leader trustworthiness is a vital force for harnessing employees' mental and physical focus to achieve a task.

Kleynhans, Heyns, Stander, and De Beer (2022) contributed that employee's psychological availability can be achieved when leaders demonstrate a trustworthiness relationship with employees at their work. Ismaila (2021) emphasized that for organisation to create safe environment to ensure employees psychological availability, leaders are inculcating to develop interpersonal trust relationship between employees.

Bakari et al. (2022) examined the impression of leader trustworthiness on employees' psychological availability. The results from their study indicate that leader trustworthiness relates positively to employee psychological availability. They suggested that leaders who act with honesty and kindness foster a sense of justice assist employees in coping with difficult times in their organisations allow employees to be more psychologically available as leaders are genuine and encourage them. Therefore, this study hypothesized that;

H₅: Leader trustworthiness is positively related to employees' psychological availability.

Relationship among leader trustworthiness, psychological safety, and intrapreneurial behaviour

Norden (2020) found that leader trustworthiness positively correlates with psychological safety of employees which instils employees' confidence at workplace and are more likely to challenge conventional thoughts and behaviours as well as posit novel strategies to various work-related issues which strengthen employees' intrapreneurial behaviour. Workers interpret a leader's trustworthy behaviour as an attempt to encourage their personal and career improvement, which boosts their psychological safety and contributes to employees' intrapreneurial behaviour, according to Luthans and Peterson (2016). Monoor (2020) contributed that, when leaders are open, approachable, and trustworthy, employees feel psychologically safe as a result of this, which allow them to be more proactive and propose novel and creative ideas. Marijke, Okyireh, Siddique, and Owusu-Okyireh (2021) posit that psychological safety stimulates a sense of vigour and influences employees' contribution to creativity and inovativeness. This indicate that when there is a favourable psychological safe atmosphere, employees are willing to give constructive suggestions within an organisation base on how to improve their services, products and process of doing things.

Aranzamendez et al. (2015) reasoned that when workers have a strong and favourable emotional connection with their leaders, it creates a favourably positive impact on employees' psychological safety, thereby allowing them to contributing to employees' intrapreneurial behaviour. Mansoor et al. (2021) stated that leader trustworthiness fosters workers cognitive safety at work to foster employee intrapreneurial behaviour. Also, Adu-Gyimah, (2016)

suggests that leaders can boost employee psychological safety when they demonstrate trustworthy behaviours by giving employees a clear vision in fostering employees intrapreneurial behaviour. Eggers (2020) indicated that employees become psychologically safe and can discuss their concerns without fears when their leaders are trustworthy, this enables workers to address work related issues base and request for needed resources as required of intrapreneurs. Psychological safety enables people to engage in activities and connections that foster good growth and inspire prosocial behaviour (Wanless, 2016). Gilson and Shalley (2004) propose that psychological safety acts as a protective measure that reduces employees' concerns about negative evaluations from others. This, in turn, encourages them to share novel ideas, challenge the existing norms, as well as participate in terms of creativity and innovation activities (Carmeli et al., 2010). Kessel et al. (2012) argue that employees perceive generating and expressing new ideas as inherently risky because such ideas inherently carry the potential for failure thereby if employees are psychologically safe and trusted, it improves their information sharing and know-how knowledge, which in turn improved their intrapreneurial behaviour. Ahmad, Mahmoud, and Posspowijojo (2021) found that when employee actually enjoys an environment that is capable of them exhibiting and implementing innovative initiatives without worrying about negative consequences to one's personal reputation, position, or professional growth allows employees to be more inclined towards intrapreneurial behaviour.

Since leader trustworthiness influences psychological safety and psychological safety induces intrapreneurial behaviour, then it is logical to

reason that psychological safety could mediate the relationship between leader trustworthiness and intrapreneurial behaviour. This study, therefore, hypothesised that:

H₆: Psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour.

The relationship among leader trustworthiness, psychological availability and intrapreneurial behaviour

The social exchange theory presupposes that workers take action in return, emotions, and attitudes when they feel trusted and psychologically available (Blau, 1964). When workers are treated appropriately and professionally by their leaders, they feel trusted and make them have mental accessible, employees are more inclined to respond by exhibiting more effort at work (Hansen, Alge, Brown, Jackson, & Dunford (2013). Heyns, and Rothmann (2018) supported that trustworthiness of a leader allows employees to be more actively and soundmind at work. In this regard, employees become psychologically available and are willing to take risks in their work performance which could aid to engender employee intrapreneurial behaviour.

Bedarkar, and Pandita (2014) asserted that workers must believe that they are safe to make errors in order to execute innovative ideas. this improves employees' cognitive resources have access to physical and emotional resources to assist workers gather, manage, and reinforce positive ideas in their work performance. Carmeli, Ramati-Navon and Menahem (2022) demonstrated that, one of the key elements in fostering intrapreneurial behaviour in organisations is how employees perceive their psychological availability. They further posit that leaders are to foster employees' strong

interpersonal and social relationships, resulting in increased psychological availability and consequently develop their intrapreneurial behaviour. Employees who trust their leaders, according to Kim et al. (2017), feel psychologically available and comfortable and by that extension feel less vulnerable to being attacked by their leader when bringing new ideas in an organisation. This encourage and improvement employees thinking ability to be more proactive as intrapreneurs. Dirks and Ferrin (2002) claimed that employees might feel mental stress if they do not trust their leaders, this can have an adverse effect on their psychological availability. and they might strive to protect themselves from taking risks within an organisation. Since leader trustworthiness psychological availability, and psychological availability induces intrapreneurial behaviour, then this study therefore hypothesized that:

H₇: Psychological availability mediate the relationship between leader trustworthiness and intrapreneurial behaviour.

Conceptual Framework

The conceptual framework for this study is established and presented in (Figure 1), based on the insights gleaned from the literature review. The framework links leader trustworthiness and intrapreneurial behaviour.

It also explains how leader trustworthiness influence employees' psychological safety. It also indicates how psychological safety influences intrapreneurial behaviour. The framework further explains the relationship among leader trustworthiness, psychological safety, and intrapreneurial behaviour. The research investigated how the trustworthiness of leaders impacts the psychological availability of employees. Additionally, this

research examined the relationship between psychological availability and intrapreneurial behaviour. The framework further establishes how psychological availability acts as a mediator between leader trustworthiness and employees' intrapreneurial behaviour. The relationship between the variables are shown in (Figure 1).

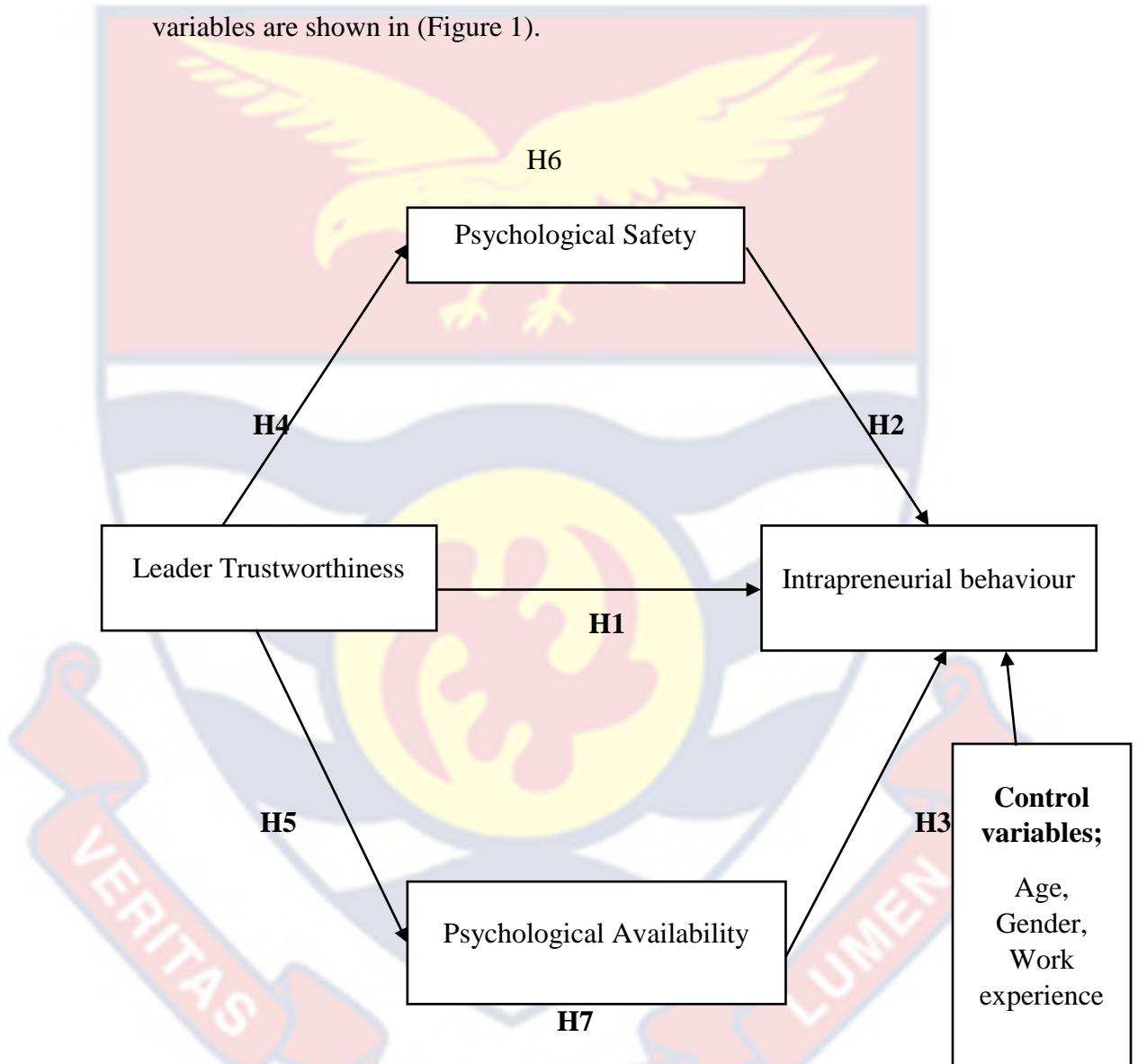


Figure 1: Conceptual Framework
Source: Author's construct, 2022.

Chapter Summary

The aim of this chapter was to review the associated literature on leader trustworthiness, employees' intrapreneurial behaviour, psychological safety, and availability. In this section, an overview of the definitions were

presented, theories, and implications associated to the concepts under study. It included an examination of pertinent literature was conducted on leader trustworthiness and intrapreneurial behaviour, as well as an examination of the hypotheses proposed. The chapter also incorporated empirical reviews on leader trustworthiness and intrapreneurial behaviour, along with a conceptual framework was formulated.



CHAPTER THREE

RESEARCH METHODS

Introduction

The purpose of this study was to investigate the role of psychological safety and psychological availability and the relationship between leader trustworthiness and intrapreneurial behaviour. This chapter focuses on the research methods employed for the study, including the research paradigm, study design, research approach, study population, sample size, sampling technique, survey instrument, data collection procedure, and statistical analysis tool used in the study.

Research Paradigm

This study embraced the positivist paradigm, which serves as a philosophical framework that focuses on empirically verifiable issues and allows for generalizations. Saunders et al. (2016) noted that positivism emphasizes on the generation of hypotheses based on existing theories, which are then tested and either confirmed or refuted through empirical research. In this paradigm, the production of facts is independent of human interpretation, and the aim is to develop theories that can be further investigated. This approach aligns with the views of Creswell (2009) and Saunders et al. (2016). Because the study's hypotheses and relationships are evaluated using social exchange theory and psychosocial climate theory, this paradigm is ideal to meet this study's goals.

Research Approach

A quantitative research approach was used in this particular study. Williams (2017) opined that, quantitative approach is appropriate as it allows

the researcher to gather data through standardised procedures based on properly set up research instrument(s), well-specified study subjects, and applicable data. Research is typically performed in a way that is characterised by its paradigm, strategy, and, in specific situations, the methods utilised to accomplish the study's objectives (Creswell & Plano-Clark, 2012).

This technique was used for this study because quantitative research employs statistical techniques to analyzed data, allowing researcher to identify patterns, trends, and relationships. Statistical analyses provide a way to quantify the strength and direction of relationships, estimated probabilities, and assessed the significance of findings. These analyses add rigor and depth to the research process, enabling the researcher to draw more conclusions that are robust.

In addition, the decision to employ a quantitative approach was driven by the objective of testing hypotheses and causal relationships among variables. This enabled the researcher to investigate the impacts of particular variables, this study aimed to analysed their effects on an outcome of interest. Through statistical analyses, they have the ability to assess the value and importance of these relationships.

Quantitative research generally incorporates statistics and measurement tool that usually explain, define, examine, and emphasise the relationship that exist between variables, as indicated by Saunders, Lewis, and Thornhill (2015). Quantitative research, as the name implies, involves many numbers, so statistical techniques were used to analysed the data collected for the study (Miller & Brewer, 2013). However, one drawback in the approach is

that, it is artificial and it has a predisposition to suffer from the problem of being excessively generalised (Alghamdi 2013; & Bryman, 2016).

Research Design

Sekaran and Bougie (2016) described research design as a predetermined plan that outlines the methods for collecting, measuring, and analyzing data in a particular study. The research design employed in this study was the explanatory design. The rationale behind employing the explanatory research design in this study was to provide a deeper understanding and explanation of the phenomena under investigation. More specifically, the study looked at the mediating role of psychological safety and psychological availability in the leader trustworthiness and intrapreneurial behaviour nexus.

In addition, explanatory design was used often aims to test or refine existing theories. By collecting empirical data and analyzing it using appropriate statistical techniques, this helped the researcher to evaluate the validity and applicability of theoretical frameworks. This design allowed the researcher to determined the extent to which a theory accurately explains a particular phenomenon. This study employed two theories, thus Social Exchange theory by Blau (1964) and Psychosocial Safety Climate theory By (Dolland et al., 2012)

An explanatory research approach has both advantages and disadvantages (Creswell & Creswell, 2017). Some of the benefits include gaining a deeper understanding of the subject, having flexibility in accessing relevant sources, drawing more robust conclusions, and making generalizations drawing upon the results obtained from the study.

The primary goal of this study was to establish objectives with the intention of offering a basic understanding of the topic, and a well-designed questionnaire was used to collect relevant data. The researcher also employed quantitative analyses to make assumptions about the outcomes of the analysis conducted.

Study Area

This study took place within the industrial sectors in Tema, Ghana. Manufacturing firms in Tema, Ghana, serve as an ideal context for this study. The manufacturing industry holds significant importance in the nation's economy, contributing significantly to employment, exports, and technological advancements. However, to sustain and enhance their competitiveness, manufacturing firms need to cultivate an intrapreneurial culture that fosters innovation, risk-taking, and employee-driven initiatives. Understanding the role of leader trustworthiness and its impact on intrapreneurial behaviour within this specific context can provide valuable insights for organisational leaders, policymakers, and researchers alike.

Thus, the specific group of individuals targeted for the study's investigation was composed of employees in manufacturing organisations. These includes firms in production of: Fats and oil, cosmetics, fruits and vegetable canning, preservation, Bakeries; Bottling facilities; Breweries; Candy, sugar and associated processing confectionery items production among others.

The manufacturing sector were chosen acceptable owing due to the nature of the tasks involved, which frequently encompass production of direct consumer products and a genuine prospect of workers intrapreneurial which play a key part in these firms. Tema was considered a suitable location for

conducting this study because as per the Ministry of Trade and Industry's findings report (2020), Tema metropolis is said to have the most industrial and dense manufacturing firms in Ghana.

Population of the study

The population represents the primary group of interest in which the investigator is engaged in gathering data and generating findings (Leedy & Ormrod, 2010). The target population for the research was made up of all workers in manufacturing businesses, excluding the department heads and factory managers from selected manufacturing companies located in Tema Ghana, as of the year 2022.

The reasons for excluded the departmental heads and managers was that, the study's focused on how leader trustworthiness affects employees psychological safety and psychological availability on intrapreneurial behaviour. These particular companies were chosen to encompass a range of industries involved in the production of goods intended for personal use, such as agro chemicals, food and beverages, cosmetics, and more. The total number of employees targeted for data collection was 1,262, representing five manufacturing companies, and this information was acquired from the human resources divisions of these companies. The reason for five selected firms was to find out the relationship between leader trustworthiness, intrapreneurial behaviour, psychological safety, and psychological availability, required an in-depth analysis within a particular setting or circumstances. By focusing on a smaller number of manufacturing firms in Tema, the researcher effectively acquired a comprehensive understanding of the dynamics and intricacies of these variables within a particular geographical area.

Sample Size and Sampling techniques

Sampling allows the researcher to select respondents from the population who are regarded as adequate and substantial to serve as a representative subgroup of the entire population. It allows the researcher to choose components from the population when the entire population is too vast to evaluate (Cooper & Schindler, (2014).

Participants of the study were made up of industrial workers from the manufacturing sectors. A total of 1,262 employees from five selected manufacturing companies in Tema were used for the study. To determine the sample size with a 5% margin of error, the criteria established by Krejcie and Morgan (1970) were followed, resulting in a selection of 291 employees. The utilization of Krejcie and Morgan's (1970) procedure was based on its previous application in recent studies conducted in Ghana, as highlighted by Boakye (2017). The sample size chosen is expected to help in providing sufficient and appropriate generalization to the research outcome.

Sampling technique

The study employed the non-probabilistic sampling technique known as simple random sampling as described by Oribhabor and Anyanwu (2019). This technique offers an equal opportunity for every individual within the population to be selected. The choice of simple random sampling in this research was suitable as it guaranteed an equal probability of inclusion for every individual included in the sample from the population. This approach facilitated the creation of a representative sample that accurately mirrored the characteristics of the larger population. By eliminating bias in the selection

process, this technique allowed the principal researcher to create accurate deductions about the population by utilising the sample.

The usefulness of this technique was also based on its capacity to choose a sample without offering any particular regard or interest to individuals of the population. The selection criteria provide impartial findings and allow for generalisation in research (Gnankob et al. 2021).

Data Collection Instrument

The main approach used for data collection was a closed-ended structured questionnaire that was specifically designed to gather information from the respondents regarding their individual knowledge about leader trustworthiness and intrapreneurial behaviour: the role of psychological safety and psychological availability. The questionnaire comprises a set of questions that allow each participant to express their viewpoint in a timely way. This strategy allows respondents to offer responses to questions individually or via an interpreter. The research questionnaire for this study consisted of five distinct elements. The first part requested questions about the demographics of respondents. These allow participants to give information on their gender, age, education level and their level of experience. The other sections of the questionnaires were comprised of a set of Likert scale questions, with each question utilizing a 7-point scale, pertaining to each of the following constructs: psychological safety, psychological availability, leader trustworthiness, and intrapreneurial behaviour. The 7-point likert scale had answers to questions ranging from the least agreement level to the highest agreement level. The second part of the questionnaire that measured leader trustworthiness was adopted from Schoorman, Mayer, and Davis (1996).

Also, the third part of the questionnaire which measured psychological safety was adapted from Edmonson (2000). Part four (4) measured employee psychological availability and the instrument was adopted from Byrne and Peters (2016). The items for employee intrapreneurial behaviour were adopted from Stull and Singh (2005).

Data Collection Procedure

To advance data collection, an introductory letter issued by the Department of Management, School of Business was acquired as evidence to authenticate the research work. A letter of introduction was dispatched to the leaders of manufacturing firms to seek their general consent to allow the inclusion of their organisation in this noble study. Such approval was solicited after the principal researcher had taken the time to explain the study's rationale in full detail. Upon the organisation inclusion request being granted, a formal introduction was initiated between the principal researcher, research field assistants and the designated respondents given permission to take part in the study.

The principal researcher sought the respondents' consent and assured them that this academic study therefore, their confidentiality and anonymity are assured no identity or substantial contributions would be identified to external bodies. The participants were provided with a clear explanation of the study's objectives by the researcher to encourage them for their full participation. The respondents were introduced on how to complete the questionnaire. A convenient date and time was set for the administration of questionnaire to the respondents.

Table 1: Measurement of constructs

Construct	Measurement items (scale ranging from 1 to 7)	Sources
Leader trustworthiness (LT)	<p>Management highly values my needs and desires.</p> <p>My supervisor actively promotes my skill development.</p> <p>My leader consistently strives to treat others fairly.</p> <p>I agree with my leader's values.</p> <p>My leader actively assists me in resolving work-related issues.</p> <p>My leader places significant importance of my needs and desires.</p> <p>My leader encourages employees to participate in important decisions.</p> <p>My leader acknowledges and commends good performance.</p> <p>My leader possesses extensive knowledge about the necessary work.</p>	Schorrman, Mayer and Davis (1996)
Psychological safety (PS)	<p>I feel comfortable being my authentic self in the workplace.</p> <p>The work environment is free from intimidation.</p> <p>I feel confident in expressing my viewpoints at work.</p> <p>Mistakes made in this job are not frequently held against me.</p> <p>Seeking assistance from colleagues within this department is an easy task.</p> <p>My manager frequently motivates me to undertake new responsibilities and acquire unfamiliar skills.</p> <p>In case I encounter any issues within the company, I can have confidence in my manager's support and advocacy for me.</p> <p>Whenever I bring up a problem with my manager, he/she demonstrates a genuine interest in assisting me in finding a resolution.</p> <p>This organisation recognizes and makes good use of my distinct abilities and talents.</p>	Edmonson (2000)
Psychological availability (PA)	<p>I possess emotional readiness to handle the challenges of my job.</p> <p>I possess a strong belief in my ability to think effectively in the professional environment.</p> <p>I have assurance in my capacity to display appropriate emotions during work-related activities.</p> <p>I am comfortable in my capacity to handle work-related challenges as they arise.</p> <p>I experience a sense of emotional well-being by the end of workday.</p>	Byrne and Peters (2016)

I am physically prepared to engage in my work.
 I feel enthusiastic when I achieve success in my job performance.
 I wholeheartedly dedicate myself to my job
 I invest substantial effort in carrying out my job responsibilities.
 I do not need to expend mental effort worrying about my personal life beyond work.

IB I am willing to take calculated risks even if there is a potential for failure. Stull and Singh (2005)
 I undertake new projects or activities with a cautious approach.
 I participate in endeavors that carry the possibility of not being successful.
 I produce valuable innovative ideas.
 I create novel processes, services, or products.
 I discover alternative approaches to tasks.
 I frequently approach tasks in distinctive ways.
 I take proactive steps in response to potential future issues, needs, or changes.
 I actively address or enhance aspects that I actively improve or fix things I do not like.
 I tend to implement changes in advance, even before they become necessary.

Source: Author's Constructs (2022)

Reliability

An instrument is considered highly reliable when it can be depended upon to consistently and accurately measure a stable value (Gnankob, Ansong, & Issau, 2021). Thus, it shows the possibility that a certain measuring procedure would provide the same results. Ablakah-Yawson (2018) suggests that the degree to which the items on a questionnaire are interconnected in measuring a particular construct is known as the reliability of the measuring tool or instrument. Reliability, as indicated by Saunders et al. (2016), helps to reduce the chances of errors and bias in a study. To evaluate the reliability of individual items, the researcher can examine internal consistency reliability, convergent and discriminant validity, and conduct confirmatory factor

analysis. In this study, the principal researcher ensured the reliability by utilizing Cronbach's alpha and composite reliability derived from the structural equation model.

Validity

On the other hand, the accuracy to which an instrument precisely measures the specific item archer to create is referred to as its validity. It aims to evaluate. According to Bryman (2016), an instrument must first be reliable in order to be considered valid. To ensure the instrument's validity in this research, the researcher incorporates questionnaires utilised in prior studies, which have been demonstrated to effectively assess the construct of interest. Convergent validity and discriminant validity are assessed in this study. Convergent validity, as described by Anderson and Gerbing (1988), is established when all factor loadings for items measuring the same variable are statistically significant. This can be achieved by loading factors and calculating the average variance, as suggested by Hair et al. (2016).

Based on the research by Hair, Ringle, and Sarstedt (2011), factor loadings equal to or greater than 0.70 are necessary to establish convergent validity. To guarantee the distinctiveness of measures for various constructs from one another, Discriminant Validity was employed. Discriminant validity assesses whether measurements that are not anticipated to have a relationship are indeed unrelated (MacKinnon, 2008). The Heterotrait-Monotrait Ratio (HTMT) is a method used to assess the discriminant validity of a PLS-SEM model. Henseler, Ringle, and Sarstedt (2015) clarified that: a latent construct has discriminant validity if the HTMT ratio is less than 0.850. The Fornell-Larcker criterion is an alternative method for evaluating discriminant validity.

As stated by Fornell and Larcker (1981), discriminant validity is established when the square root of the average variance for each latent variable is greater than the correlation values among the latent variables (Agyemang & Ansong, 2016).

Ethical considerations

Ethical considerations encompass the fundamental principles and guidelines that researchers are required to follow when conducting studies involving human participants or confidential information. Falb, Laird, Ratnayake, Rodrigues, and Annan (2019) emphasize that these considerations are crucial for conducting research in a way that honors the rights, autonomy, and the well-being of the participants included in this study.

The principal researcher ensured to offer the heads of employees of manufacturing firms a letter of reference from the department of Business Management, University of Cape Coast, and Ethical Clearance form from the Internal Review Board (IRB), University of Cape Coast.

Consent after being informed was obtained from respondents by adding an informed consent form to the surveys used to gather data. The researcher provided an explanation of the study objectives to the participants before handing them questionnaires to complete. In order to ensure confidentiality, the researcher adhered to the principles of confidentiality and anonymity. All provided information was treated as confidential and utilized solely for academic purposes. Specifically, the questionnaires did not require respondents to produce their names, e-mail address or telephone numbers.

The researcher maintained the anonymity of the study participants by not disclosing their names or identities or other information that made it

feasible to identify them. Participants had the freedom to discontinue their participation in the survey at any given time and at their own discretion. Also, there was no enticement for involvement in the study. Thus, participation have completely optional. The whole activity of data collecting did not harm participants.

Lastly, the researcher accessible of personal information and contact details including the supply of phone number and email address so that participants may get in touch for any information or clarification about the study.

Data Processing and Analysis

For this study, the statistical software SmartPls (version 4.0) was utilised. The questionnaires data were inputted into Microsoft Excel and appropriate codings assigned to them. In order to minimize errors, the data on the questionnaire were careful entered into the Excel software and scrutinize to prevent outliers which may bias the results. The data from the Excel was saved as “csv comma delimited” to enable it being transported to the SmartPls for further analysis. The study's objectives were evaluated using structural equation modeling (SEM). After controlling for other confounding factors such as age, gender, level of education and work experience, the study assessed the mediating role of psychological safety and psychological availability in the leader trustworthiness and employee intrapreneurial behaviour nexus.

Structural Equation Modelling

Structural Equation Modelling is a statistical technique that is second general and it enables researchers to measure variables using indicator variables. It facilitates to quantify the error in observed variables, the approach proposed by Chin (1998) was applied. Partial Least Squares-Structural Equation Modeling (PLS-SEM) was utilized to perform the analysis determine the connections among the variables in a model with the goal of reducing the remaining variation in a dependent variable. Structural Equation Modelling has two key elements which are; measurement equation (through confirmatory factor analysis) and structural equation (through path analysis. The Confirmatory factor analysis was employed to validate constructs and refine scales, while path analysis is utilized to demonstrate the relationships that exist among variables of a given study.

Partial Least Square- Structural Equation Modelling estimation of path model nexuses minimizes R^2 values of the dependent variable (Hair, Hult, Ringle & Sarstedt, 2014). It is also useful when dealing with complex models and small sample sizes (Hair et al., 2014; & Rezaei, 2015). This approach is suitable in situations where a theory is not yet fully developed (Ravand & Baghaei, 2016). Hair et al. (2016) confirmed that, structural equation modelling has two measurement scales which are formative and reflective. Formative measurement scale is one that cause the construct of the study while reflective measurement scale is the construct that causes indicators of the study. With respect to this study, reflective measurement scale was employed because indicators in this study were caused by its construct.

The decision to utilise structural equation modeling in this study was prompted by the following benefits:

1. The utilization of latent variables enables the valid and reliable measurement of constructs through multiple indicators (Jeon, 2015).
2. In comparison to regression, Structural Equation Modeling (SEM) offers greater clarity in establishing causal relationships between latent variables.
3. SEM allows researchers to simultaneously estimate and analyzed the examination of the direct effect, indirect effect, and overall effect of multiple independent and dependent variables.
4. Cassel et al. (1999) state that Structural Equation Modeling exhibits robustness by effectively handling issues such as skewed data, multicollinearity among indicators, and model misspecification.
5. SEM enables the integration of the application of confirmatory factor analysis correlation and regression analysis within a single comprehensive model.

Mediating procedures/ analysis in SEM

According to the definition provided by Hair, Hult, Ringle, and Sarstedt (2017), mediation refers to the occurrence when an additional variable or construct is introduced between two correlated variables or constructs. This intermediary variable, referred to as a mediator, captures a portion of the relationship between the independent and dependent variables within the partial least square path mode. By employing this approach, the mediator reveals the actual connection between the independent and dependent variables. In the context of this specific study, the researchers investigated the

mediating influences of psychological safety and psychological availability on the correlation between leader trustworthiness (independent variable) and intrapreneurial behaviour (dependent variable). Hair et al. presented a structured methodology for conducting mediator analysis using the framework of partial least squares-structural equation modeling.

The study employed mediating procedures developed by Nitzl et al. (2016) to investigate the mediating effect. This involved initially testing the significance of the indirect effect through the mediator to determine the nature of the mediation. The significance of the indirect effect played a key role in identifying the type of mediation observed in the study

Chapter Summary

The chapter outlined the research methods implemented to fulfill the research objectives. It included the description of the research design, research approach, a concise overview of the study population, and the sample size was determined. Furthermore, the section introduced a brief explanation of the structural equation model utilized in the study. The chapter also covered the data collection procedures and techniques utilised, along with the ethical considerations addressed during the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

In this chapter, the following information's are presented detailed analysis of this study's results. The chapter attempts to provide empirical evidence to the study's objectives by the use of structural equation modelling. The goal of the study was to ascertain the mediating effect of psychological safety and psychological availability in the leader trustworthiness and employee intrapreneurial behaviour nexus. Additionally, the chapter provides an assessment of the research's reliability and validity instrument employed in the study.

Demographic Characteristic

The information about the demographic characteristics participants. Table 2 displays the details regarding the demographic traits of the respondents. The study obtained information about the participant's age, gender, level of education and the level of experience in order to understand their nature and characteristics.

Table 2: Background characteristics of respondents

Variable	Option	Frequency	Percentages
Gender	Male	157	53.95
	Female	134	46.05
Total		291	100
Age	18-25 years	62	21.31
	26-33 years	108	37.11
	34-41 years	61	20.96
	42-49 years	41	14.09
	50 years	19	6.53
Total		291	100
Education level	Primary/JHS	39	13.40
	Senior High School	66	22.68
	Bachelor/HND/Vocation/Diploma	129	44.32
	Masters/PhD	44	15.12
	None	13	4.68
Total		291	100
Number of years	Below 2	102	35.05
	3-10 years	83	28.52
	11-15 years	59	20.27
	16-20 years	24	8.24
	21-25 years	13	4.47
	26 and above	10	3.45
		291	100

Source: Field Data, Adu (2022)

Table 2 reveals that majority of the participants are males (53.95%) while 46.05% percent of the participants are females. Most of the people that took part of the survey were made up of males. Also, the table presents the study presents data regarding the age distribution of the participants, indicating that 21.31 percent of the respondents fell within the age range of 18 to 25 years. 37.11 percent were within the age group of 26 to 33 years, 6.53 percent were 50 years or above. The statistics depict that majority of the participants could be classified as youthful and energetic. The information about the educational level of the participants reveals that only 4.68 percent of the total respondents have never had any form of formal education. This

means that 95.32 percent of the total population have been exposed to one kind of formal education or the other.

The table reveals that 59.44 percent of the total respondents have had a tertiary education. More so, according to the study findings, 64.95 percent of the overall respondents reported having a work experience of three years or more or more in their current organisation. Only a minority of 35.05 percent reported having less than two years of work experience in their current positions.

Assessment of Measurement Models for the Study

Within this section, the study primarily concentrates on the measurement models. The section commences by evaluating the loadings of the indicators. The assessments of the measurement model include indicator loadings, internal consistency reliability (composite reliability), convergent validity (AVE - Average Variance Extracted), and discriminant validity (Fornell-Lacker and HTMT). Indicators were generated using a reliable PLS algorithm to evaluate the measurement model consistently. The subsequent tables display the results of this assessment.

Assessing indicator loadings

Table 3 illustrates that certain indicators were excluded compared to the indicators presented in Figure 2. To enhance the overall model's reliability, all indicators that exhibited loadings below the recommended threshold of 0.7, as suggested by Hair et al. (2017), were eliminated. Out of the 40 indicators used to measure different latent variables, a total of 15 indicators failed to meet the established criteria for indicator reliability and were therefore removed.

Interestingly none of the scales of the constructs were fully maintained. Intrapreneurial Behaviour (IB) which had 10 indicators were reduced to 6 indicators. Four of the indicators loaded less than 0.7. Leader trustworthiness which was independent had 10 indicators. Out of all the indicators, only four exhibited loadings surpassing the threshold of 0.7. Psychological availability had 10 indicators however, only six (6) of the indicators loaded above 0.7. Psychological Safety consisted of nine (9) indicators, with eight of them demonstrating loadings above the threshold of 0.7.

Table 3: Cross Loadings

	Age	Gender	Intrap. Behaviour	Leader Trust.	Psy. Avai	Psyc Saf	Working Experience
AGE	1.000						
EXPE							1.000
GENDER		1.000					
IB1			0.793				
IB2			0.850				
IB3			0.791				
IB5			0.702				
IB6			0.758				
IB7			0.790				
LT10				0.728			
LT2				0.789			
LT3				0.854			
LT4				0.844			
PA10					0.821		
PA2					0.750		
PA3					0.754		
PA7					0.741		
PA8					0.777		
PA9					0.817		
PS1						0.736	
PS2						0.800	
PS3						0.823	
PS4						0.832	
PS5						0.836	
PS6						0.813	
PS7						0.798	
PS8						0.828	

Source: Field Survey (2022)

According to the findings presented in Table 3, all six indicators related to intrapreneurial behaviour exhibited loadings above 0.7, with the lowest loading at 0.702 and the highest at 0.850. These results indicate that the retained indicators are reliable. Similarly, for leader trustworthiness, the lowest indicator loading observed was 0.728. and the maximum was 0.854. The indicators measuring psychological availability ranged from 0.741 to 0.821. Moreover, the retained items for psychological safety also demonstrated loadings well above the threshold of 0.7, with a minimum loading of 0.736 and a maximum loading of 0.836.

Assessing Internal Consistency Reliability

In this research, the internal consistency reliability of the constructs was assessed using the composite reliability. The composite reliability was considered a more suitable measure of internal consistency compared to Cronbach's alpha, as suggested by Rossiter (2002).

Table 4: Validity and Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Intrapreneurial Behaviour	0.872	0.879	0.904	0.611
Leader Trustworthiness	0.817	0.819	0.880	0.649
Psychological Availability	0.869	0.871	0.901	0.604
Psychological Safety	0.924	0.926	0.938	0.654

Source: Field Survey (2022)

According to the findings presented in Table 4, all latent variables examined in this study were deemed reliable, as their loadings exceeded the threshold of 0.7 (rho-a) recommended by Bagozzi and Yi (1988). Among the

latent variables, Psychological Safety attained the highest composite reliability score of (rho-a) 0.926 this was followed by Intrapreneurial behaviour rho-a (0.879), psychological availability rho-as (0.871), and the variable with least composite reliability (rho-a) was leader trustworthiness (0.819). The findings suggest that the model demonstrates internal consistency reliability. Additionally, Table 4 presents results concerning convergence validity.

Assessing Convergent Validity

The assessment of convergent validity involved the utilization of the average variance extracted (AVE). Convergent validity pertains to the extent to which a measurement exhibits positive correlations with other measures of the same construct as described by Hair et al. (2017). An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance in its indicators. Conversely, an AVE value below 0.50 suggests that, on average, a greater proportion of variance remains in the error of the items rather than being explained by the construct. Based on the results presented in Table 5, all constructs in the model possess an AVE exceeding 0.5. Psychological safety exhibited the highest AVE, while psychological availability had the lowest. This implies that the constructs within the model can explain more than half of the variance observed in their respective indicators. Furthermore, as part of evaluating the measurement model, discriminant validity was also examined.

Assessing Discriminant Validity

Ensuring discriminant validity suggests that a construct is distinct and encompasses phenomena that are not represented by other constructs within the model, as explained by MacKinnon (2008). In this research, both the Fornell-Larcker criterion and the HTMT (Heterotrait-Monotrait) ratio were employed to establish discriminant validity. The Fornell-Larcker criterion involves comparing the square root of the AVE values with the correlations between latent variables (Fornell & Larcker, 1981). Specifically, the square root of the AVE for each construct should exceed its highest correlation with any other construct, according to Hair et al. (2013). The findings presented in Table 5 demonstrated that the square root of each variable significantly exceeds its correlations with other constructs in the study. Consequently, each construct is deemed unique, and no two constructs captured the same phenomenon.

Table 5: Fornell-Lacker Criterion

	Age	Gender	Intra. Beh	Lead. Trust	Psycho. Avai.	Psych. Safety	Work. Exp.
Age	1.000						
Gender	0.740	1.000					
Intrapreneurial Behaviour	-0.059	-0.029	0.782				
Leader Trustworthiness	-0.051	-0.059	0.676	0.805			
Psychological Availability	-0.073	-0.068	0.399	0.701	0.777		
Psychological Safety	-0.088	-0.104	0.458	0.329	0.274	0.891	
Working Experience	0.362	0.117	-0.031	0.028	-0.007	-0.017	1.000

Source: Field Survey (2022).

The Fornell-Larcker criterion exhibits limited effectiveness, particularly when the indicator loadings of the constructs being evaluated have

only slight differences (e.g., all indicator loadings ranging from 0.70 to 0.80). The criterion's ability to detect discriminant validity issues improves to some extent when the indicator loadings differ more significantly, but it still falls short in providing a comprehensive assessment of overall discriminant validity, as noted by Voorhees, Brady, Calantone, and Ramirez (2016). To address this limitation, Henseler, Ringle, and Sarstedt (2015) propose utilizing the Heterotrait Monotrait ratio (HTMT) to assess discriminant validity. According to Henseler et al. (2015), a latent construct possesses discriminant validity when its HTMT ratio is below 0.850. The findings presented in Table 6 demonstrate that the HTMT values are well below 0.850.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

	Age	Gender	Intra. Beh.	Lead. Trust	Psych. Avail.	Psych. Safety	Work. Exp.
Age							
Gender	0.740						
Intrapreneurial Behaviour	0.111	0.102					
Leader Trustworthiness	0.057	0.065	0.799				
Psychological Availability	0.079	0.073	0.809	0.829			
Psychological Safety	0.090	0.108	0.840	0.805	0.862		
Working Experience	0.562	0.617	0.071	0.031	0.029	0.058	

Source: Field Survey (2022)

Model Fitness

The evaluation of model fit typically employs various criteria, both in terms of absolute fit and comparative fit. Absolute fit criteria, such as chi-square (X^2), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), root-mean-square residual (RMR), and Root-Mean-Square-Error of Approximation (RMSEA), assess the disparities between the observed and

model-implied correlation or covariance matrix, as explained by Hair et al. (2014). On the other hand, comparative fit criteria focus on determining whether the considered model outperforms alternative models in accounting for the observed data. Comparative fit assessment involves comparing a "baseline" model with theoretically derived models, as outlined by Kelloway (1998). Some criteria falling into this category include the normed fit index (NFI), comparative fit index (CFI), and the relative non-centrality index (RNI).

The measurement model's fit to the collected data was evaluated using several fit indexes, each of which has established threshold values for acceptability. These indexes include the Root Mean Squared Error of Approximation ($RMSEA \leq 0.08$), Goodness of Fit Index ($GFI \geq 0.90$), Normed Fit Index ($NFI \geq 0.90$), and Comparative Fit Index ($CFI \geq 0.90$), as recommended by Bagozzi and Yi (2012) and Hair et al. (2010). The adequacy of the theorized model's creation of a covariance matrix was assessed using the X^2 goodness-of-fit value, which compares the estimated coefficients with the observed covariance matrix. However, it is important to note that the X^2 value can be influenced by the sample size, and when a large number of participants are involved, it can lead to an inflated X^2 value when evaluating model fit, as explained by Hu and Bentler (1999).

To evaluate the robustness and suitability of the construct measurements, numerous researchers have employed a technique involving dividing the X^2 value by the degrees of freedom, instead of solely relying on the overall X^2 and its associated significance test. It is generally advised that a desirable X^2/df ratio (Normed Chi square) for a large sample is below 3. These

fit indices were employed following the classification proposed by Byrne (2013), which is widely accepted as the commonly used criteria in the social sciences field.

To evaluate the fitness of the model, 40 measurement items or questions were employed. It was considered that variables that did not meet certain indicator means would be eliminated to enhance the fit of the measurement model. However, all the items used for measurement demonstrated a satisfactory fit, and therefore, no items needed to be removed to attain the desired model fit indices.

Table 7: Model Fit Measures for Final Measurement Model

Measure	Estimate	Threshold	Interpretation
CMIN	809.857	--	--
DF	291	--	--
CMIN/DF	2.783	Between 1 and 3	Excellent
CFI	0.996	>0.95	Excellent
SRMR	0.054	<0.08	Excellent
RMSEA	0.053	<0.06	Excellent
PClose		>0.05	Excellent

Source: Field Survey (2022).

In addition, Hu and Bentler (1999) proposed several indicators to assess the fitness of data. These indicators include the Normed Fit Index (NFI), Comparative Fit Index (CFI), Relative Non-Centrality Index (RNI), Root Mean Squared Error of Approximation (RMSEA), and Goodness of Fit Index (GFI). Table 7 displays the results obtained using Smart PLS version 4. These findings suggest that there is a notable correlation among the questionnaire items and constructs, suggesting a satisfactory fit of the model.

Assessing the structural model

This section offers an evaluation of the hypotheses presented in this study. The assessment of the structural model includes the examination of collinearity among constructs, coefficient of determination, predictive relevance, effect size, significance of the path coefficient, and running both the direct and indirect models simultaneously, as recommended by Nitzl et al. (2016).

Table 8 presents The results of the assessment for multicollinearity among the indicators used in this study were examined. As explained by Hair et al. (2011) within the framework of PLS-SEM, if the tolerance value is 0.20 or less and the VIF (Variance Inflation Factor) value is 5 or greater, it indicates a potential presence of collinearity issues. When an indicator has a VIF rating of 5, it means that the other formative indicators associated with the same concept account for 80% of its variation. Regarding the endogenous variables, namely psychological safety, psychological availability, and leader trustworthiness, The findings presented in Table 8 display the lowest VIF value recorded as 2.037 and the highest value as 2.903. Additionally, the lowest tolerance value observed was 0.344, while the highest tolerance value reached 0.491.

Table 8: Multicollinearity

	VIF	tolerance
Leaders Trustworthiness	2.363	0.423
Psychological Safety	2.037	0.491
Psychological Availability	2.903	0.344

Source: Field Survey (2022)

The VIF (Variance Inflation Factor) data in Table 8 further indicate the absence of common technique bias. According to Kock and Lynn (2012), a VIF score more than 3.3 shows the presence of pathological collinearity and implies that the model may be impacted by common method bias. On the other hand, if the VIF values from a thorough collinearity test are all 3.3 or lower, it can be inferred that the model does not have any problems associated with vertical or lateral collinearity or common method bias, as explained by Kock (2013).

Assessing coefficient of determination and predictive relevance

The R^2 , which measures the predictive accuracy of the model, can also be interpreted as the combined influence of the exogenous variable(s) on the endogenous variable(s). According to Hair et al. (2014), a coefficient of determination (R^2) of 0.25, 0.5, and 0.75 is considered weak, moderate, and substantial, respectively, for structural models. The authors also proposed that a predictive relevance (Q^2) of "0.02, 0.15, and 0.35" and an effect size (f^2) of "0.02, 0.15, and 0.35" are classified as small, medium, and large, respectively, for structural models.

Referring to Table 9, it can be concluded that leader trustworthiness, psychological availability, and psychological safety collectively account for 69.5 percent of the variations observed in intrapreneurial behaviour. That is, 69.5 percent of the variations in intrapreneurial behaviour were explained by was leader trustworthiness, psychological availability and psychological safety. Regarding predictive relevance, the findings indicated a moderate level of predictive relevance for the model on the endogenous variable, with a value of 0.5319. This suggests that the exogenous variables effectively predict the

endogenous variable. In terms of effect size, the results indicated that all variables have a small effect size on the endogenous variable.



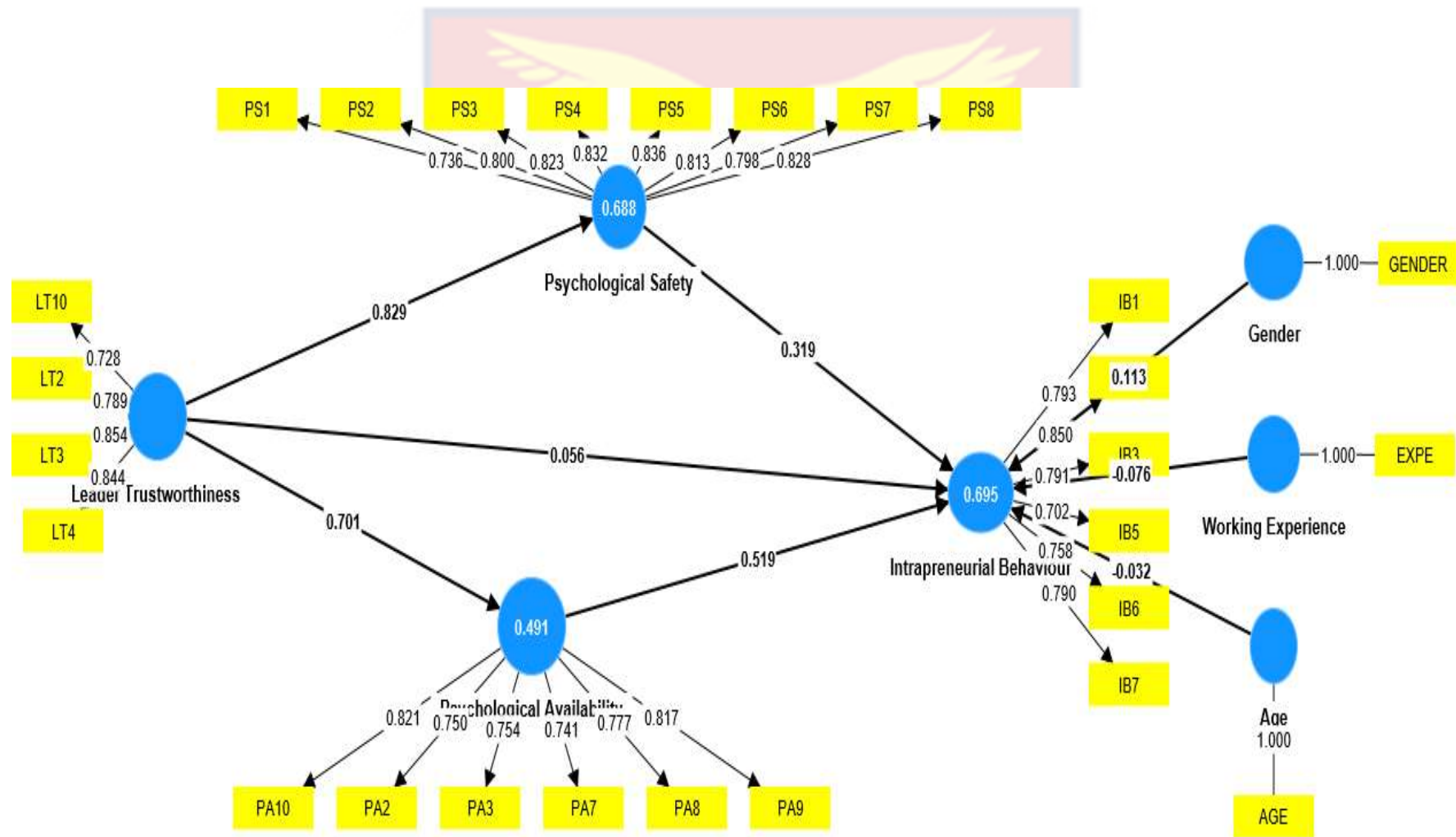


Figure 2: Model
Source: Author's Construct (2022)

Leader Trustworthiness and intrapreneurial behaviour in manufacturing firms

The first objective of the study was to analyse the effect of leader trustworthiness on the intrapreneurial behaviour among manufacturing firms.

This objective was achieved by using the structural equation model. The result is presented on Table 9.

Table 9: Leader Trustworthiness, Psychological Safety, Psychological Availability and Intrapreneurial Behaviour

	Path	T-statistics	R ²	Adjusted R ²	Q ²	P-value	F ²
IB			0.695	0.688	0.5319		
LT	0.056	0.868				0.386	0.003
PS	0.319	4.072				0.000	0.079
PA	0.519	7.229				0.000	0.343
Gender	0.113	2.275				0.023	0.016
Age	-0.032	0.738				0.460	0.001
WE	-0.075	1.788				0.074	0.011

Source: Field Survey (2022)

From Table 9, The result of the study shows that leader trustworthiness has no significant relationship between intrapreneurial behaviour among employees in the manufacturing firms in Ghana [$B=0.056$; $t(291)= 0.868$; $p > 0.05$]. This indicates that, irrespectively of the trust that employees have in their leaders, it would not enhance their creativity and innovativeness at the workplace. Having trust in the leaders at the workplace would allow employees to be influenced by these leaders. Their influence could allow employees to undertake tasks by themselves without or with minimal supervisions. This would enable employees to come up with new ways of

performing their tasks which would enhance their level of intrapreneurship among employees and improving the organisational performance.

Trust is a crucial characteristic that enhances individual creativity, the generation of ideas, the sharing of information, and openness, as stated by Dirks and Ferrin (2002), Den Hartog (2003), and Bidault and Castello (2009). Creativity allows leaders to effectively tackle the constantly evolving challenges of an uncertain future. Leadership trust establishes a solid foundation for employees and their organisations to be flexible, adaptable, and successful during periods of ongoing change. The behaviours that foster trust are precisely the behaviours that effectively manage change.

Stull and Aram (2010) studied on trust as an influencing mechanism of intrapreneurship. Their study found that trust from management is one of the key factors influencing intrapreneurial behaviour of employees. This happened to contradict with the outcome from this study. According them, employees act on the directions from leaders. Their trust in the leader would indicate how they would act. Acting on the leaders' directions would eventually enable them to bring up new ideas which would enhance the perceived level of creativity among employees at the work place.

In line with the study's results, Ozsungur (2019) who studied on leadership, intrapreneurship, service innovation performance and work engagement in chambers of commerce and industry, found that leader trustworthiness influences work engagement but not intrapreneurship. That is, when employees trust their leaders, their level of creativity would not be improved.

Psychological safety and employees' intrapreneurial behaviour

The second objective of the study was to analyse the effect of psychological safety on employees' intrapreneurial behaviour. From Table 9, there is a positive and significant relationship between psychological safety and employee intrapreneurial behaviour [$B=0.319$; $t(291) = 4.072$; $p < 0.05$]. A unit increase in psychological safety would lead to a 0.319 increase in intrapreneurial behaviour of employees. Psychological safety refers to the perception held by employees or followers that they will not face punishment or embarrassment when they contribute new ideas, ask questions, express concerns, or make mistakes. The creative process necessitates cognitive resources for generating ideas, psychological resources for managing failures and overcoming resistance in others, social resources for sharing ideas and gaining support for their implementation, and proactive involvement in creative and innovative tasks for executing and implementing new ideas.

In the workplace, there exists a collective expectation among team members that they will not be subjected to embarrassment, rejection, or punishment when they share ideas, take risks, or seek feedback. Research has shown that teams that foster an environment of risk-taking and view mistakes as opportunities for learning are the most successful and productive. When employees demonstrate respect for each other's vulnerability, they cultivate an atmosphere of trust and safety, which in turn promotes greater creativity and intrapreneurship. By reducing fear, innovation is encouraged.

Psychological safety plays a crucial role in enhancing a company's ability to continuously enhance its processes. By fostering psychological safety, organisations enable a wider range of ideas for process improvement to

emerge. Psychological safety revolves around creating an environment where employees feel comfortable sharing their thoughts, being true to themselves, and contributing without the fear of negative consequences. These consequences can arise not only from management but also from peers. Employees may hesitate to share their ideas if they fear being perceived as incompetent by their colleagues. When a workplace culture excludes individuals with new ideas, it establishes a climate that stifles innovation. Conversely, fostering an inclusive approach supports and nurtures innovation within the organisation.

The psychological safety that is created would enable the employees to have the freewill to undertake any decision they prefer. This would enhance their creativity level which would enhance their intrapreneurial behaviour and also the organisational performance as whole. This confirms that psychological safety has a positive and significant effect on intrapreneurial behaviour of employee of manufacturing firms. Mahmoud, Ahmad and Poespowidjojo (2021) studied on the psychological safety and individual performance: the mediating effect of intrapreneurial behavior. The result shows that psychological safety has a significant direct relationship with intrapreneurial behaviour.

The results align with previous studies (Frazier et al., 2017; Koopmann et al., 2016; Liu et al., 2016; Rojuaniah et al., 2016) which have also demonstrated the significant impact of psychological safety on intrapreneurial behaviour. Therefore, psychological safety is valuable in fostering intrapreneurial behaviour among employees of the manufacturing firms in Ghana. Thus, the outcome of this objective provides additional validation for

the theoretical understanding of the connection between psychological safety and intrapreneurial behaviour. This implies that manufacturing companies that prioritize psychological safety are more likely to foster intrapreneurial behaviour among their employees. When employees feel comfortable and confident in expressing and implementing new ideas without the fear of negative repercussions to their personal image, position, or career, they are more inclined to engage in intrapreneurial behaviour.

Mahmoud, Ahmad, and Poespowidjojo (2018) conducted a study examining the impact of psychological safety and psychological empowerment on intrapreneurial behaviour and its influence on individual performance. Surprisingly, their findings indicated that psychological safety had no significant effect on intrapreneurial behaviour. This outcome aligns with Dolland et al.'s (2012) psychosocial safety climate theory and Blau's (1964) social exchange theory. These theories suggest that the relationships between employees and their leaders are influenced by positive or negative experiences within the organisation, which in turn reciprocate in their attitudes and behaviours. Therefore, when an organisation fosters a favorable environment of psychological safety for its employees, they are more likely to respond with positive behaviours, such as engaging in risk-taking, proactiveness, and innovation. This finding is consistent with previous research conducted by Frazier et al. (2017), Mahmoud et al. (2018), Monfared et al. (2019), and Newman et al. (2017), which have also demonstrated the positive impact of psychological safety on employee behaviours.

Psychological availability is positively related to employees' intrapreneurial behaviour

The third objective of the study was to analyse the effect of psychological availability on the employee's intrapreneurial behaviour. From the table 9, there was a positive and significant relationship between psychological availability and employee intrapreneurial behaviour [$B=0.519$; $t(291)= 7.229$; $p < 0.05$]. A unit increase in psychological availability would lead to a 0.519 increase in intrapreneurial behaviour of employees. When individuals possess high psychological availability, it suggests that they have ample reserves of physical, emotional, and cognitive resources at their disposal. This abundance of resources enables them to allocate a greater amount of their capacity towards engaging in creative endeavours.

The findings suggest that psychological availability plays a significant role in predicting innovative work behaviour among administrative staff. When individuals feel a sense of security, they are more likely to actively participate and contribute their knowledge and efforts. This increased engagement leads to higher levels of productivity and creativity. Consistent with these results, a study conducted by Vansteenkiste, Lens, Soenens, and Luyckx (2016) also explored the relationship between psychological availability and innovative work behaviour, finding significant positive associations between the two variables. Moreover, psychological availability is identified as an important personal resource that positively influences engagement at work, physical health, and vitality, as demonstrated by Scott and Bruce (1998).

Control variables

From the table, it showed gender had a positive and significant effect on employees intrapreneurial behaviour [$B=0.113$; $t(291) = 2.275$; $p < 0.05$].

A unit change in gender from being a female to a male would lead to a 0.113 increase intrapreneurial behaviour. This indicates that, males tend to be more creative and innovative as compared to females. Men seem to focus more on the creative background and authenticity as compared to females.

Age as control variable also showed that there was an insignificant relationship between age and intrapreneurial behaviour of employees [$B=-0.032$; $t(291) = 0.738$; $p > 0.05$]. The decline in creativity with advancing age can be influenced by various factors such as education, health, daily activities, and attitude. However, it is noteworthy that no significant age-related differences were observed across the tasks examined. Surprisingly, older adults exhibited a greater number of original responses compared to their younger counterparts. Research conducted by psychologists studying creative achievements throughout the lifespan generally indicates that creativity reaches its peak during the mid- to late-30s or early 40s.

Working experience which was also a control variable had a negative but insignificant effect on employee intrapreneurial behaviour [$B=-0.075$; $t(291) = 0.738$; $p > 0.05$]. Irrespective of the level of experience one has, being creative do not depend on it.

Leader trustworthiness is positively related to employees' psychological safety

The fourth objective of the study was to analyse the effect of leader trustworthiness on employee's psychological safety. The result is presented on table 10.

Table 10: Leader trustworthiness and employees' psychological safety

Path	T- statistics	R ²	Adjusted R ²	Q ²	P- value	F ²
PS		0.688	0.687	0.662		
LT	0.829	39.330			0.00	2.205

Source: Field Survey (2022)

From Table 10, there was a positive and significant relationship between leaders' trustworthiness and employee's psychological safety [$B = 0.829$; $t(291) = 39.330$; $p < 0.05$]. A unit increase in leaders' trustworthiness would lead to a 0.829 increase in employee's psychological safety. Psychological safety plays a vital role in the performance of employees, who are the backbone of modern organisations. In order to enhance psychological safety in the workplace, leaders need to start by introspecting and acknowledging their own emotions and fears. Subsequently, they should extend their support outwardly to create an environment where others feel secure and comfortable.

A leader who is deemed trustworthy prioritizes cultivating strong relationships with others. They consistently offer support and are willing to go above and beyond to assist their employees. Additionally, they actively foster the growth and advancement of their workers. At the core of a trusted leader is a commitment to serving and supporting others. They demonstrate genuine

receptiveness and attentiveness when listening to their employees. When employees trust their leaders, they are more inclined to openly express their ideas, pose questions, share concerns, or report mistakes without experiencing fear of facing punishment or humiliation. This strengthens the bond between the leader and the employees. In a work setting, it is an understood expectation among team members that they will not face embarrassment, rejection, or punishment for sharing ideas, taking risks, or seeking feedback. Leaders' trustworthiness would enhance the conducive psychological safety among employees of manufacturing firms.

Furthermore, Aranzamendez, James, and Toms (2015) conducted a study to investigate the factors that contribute to psychological safety. The results of their study indicated that certain factors play a significant role in enhancing psychological safety. These factors encompassed leadership inclusiveness, trustworthiness, change-oriented leaders, and ethical leadership. Notably, the study revealed a positive correlation between leader trustworthiness and psychological safety, which aligns with the study's overall findings.

According to Bienefeld and Grote (2012), employees exhibit hesitancy in expressing their thoughts or concerns, despite their awareness of the importance of a safe environment. Edmondson (2004) characterized psychological safety as a set of interpersonal beliefs that can differ across teams and organisations, influenced by contextual factors and organisational culture.

Leader trustworthiness and employees' psychological availability

The fifth objective of the study was to analyse the effect of leader trustworthiness on employees' psychological availability. The result of the study has been presented on table 11.

Table 11: Leader trustworthiness (LT) and Psychological Availability (PA)

Path	T- statistics	R ²	Adjusted R ²	Q ²	P- value	F ²
PS		0.491	0.490	0.385		
LT	0.701	17.280			0.000	0.966

Source: Field Survey (2022)

From Table 11, the coefficient of determinations which explains the percentage of the variations in dependent variable explained by the independent variable was 0.491. That is, 49.1 percent of the variations in psychological availability was being explained by leadership intrapreneurial behaviour.

In relation to the significance of the variable, there was a positive and significant relationship between leaders' trustworthiness and psychological availability [B=0.701; $t(291) = 17.280$; $p < 0.05$]. A unit increase in leaders' trustworthiness would lead to a 0.701 increase in employees' psychological availability.

Fostering team morale is of utmost importance, and it relies on the leader's integrity, honesty, and trustworthiness. Leaders who lack trust in their team and fail to earn trust in return may achieve short-term success, but their effectiveness will diminish over time. Psychological availability refers to an individual's confidence in having the necessary physical, emotional, or

cognitive resources to actively participate in their work (Kahn, 1990; May et al., 2004). When employees believe and trust that their leaders are efficient and knowledgeable about what they do, it would encourage followers or employees to believe in their physical, emotional or cognitive resources to work.

According to Edmondson (2021), establishing trust between team members and their leader is crucial for cultivating psychological availability. This trust is not established solely on rational expectations but is developed through interpersonal connections where choices are guided more by emotions and intuition rather than calculations. When employees develop a strong and positive emotional bond with their leader, it positively impacts their belief in their ability to invest themselves physically, cognitively, and emotionally in their work, as well as the overall performance of the employees' (Schaubroeck et al., 2011).

Qian, Zhang, Wang & Cheng (2020) studied on how leaders trustworthiness influences the psychological availability of employees. They found that trust in employees enhances the belief in the emotions, physical and cognitive that employees usually have in undertaking their work. This happened to be consistent with the findings of the study. Russo, Shteigman and Carmeli (2016) on the other hand found that leaders trustworthiness failed to significantly influence the psychological availability of employees. The study found that irrespective of the trust employees or followers have in their leaders, they do not allow them to influence their emotions relating to the work they are being assigned to.

Psychological availability mediates the relationship between leader trustworthiness and intrapreneurial behaviour

The seventh objective of the study was to analyse the mediating effect of psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour. The result is presented on the Table 12.

Table 12: Psychological availability mediates the relationship between leader trustworthiness and intrapreneurial behaviour

	T statistics		
	Path	(O/STDEV)	P values
Leader Trustworthiness -> Psychological Availability -> Intrapreneurial Behaviour	0.364	7.655	0.000

Source: Field Survey (2022)

From the table 12, the mediating effect of psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour of employees of the manufacturing firms. The direct relationship between leaders' trustworthiness and intrapreneurial behaviour was insignificant. However, the indirect relationship between leaders' trustworthiness and intrapreneurial behaviour through psychological availability was significant [$B=0.364$; $t(291) = 7.655$; $p < 0.05$]. The social exchange theory presupposes that employees reciprocate their actions, emotions, and attitudes when they feel trusted and psychologically available (Blau, 1964). When employees are subjected to equitable treatment and professionally by their leaders, they feel trusted and make them have mental accessible. Employees are more inclined to respond by exhibiting more effort at work (Hansen, Alge, Brown, Jackson, & Dunford (2013). Heyns and Rothmann (2018) supported that

trustworthiness of a leader allows employees to be more actively and sound mind at work. In this regard, employees become psychologically available and are willing to take risks in their work performance which could aid to engender employee intrapreneurial behaviour.

Bedarkar, and Pandita (2014) asserted that in order for workers to execute new ideas, they must feel that they are safe to make errors this improves employees' cognitive resources have access to physical and emotional resources to assist workers gather, manage, and reinforce positive ideas in their work performance. Employees who trust their leaders, according to Kim et al. (2017), feel psychologically available and comfortable and by that extension feel less vulnerable to being attacked by their leader when bringing new ideas in an organisation. This encourage and improvement employees thinking ability to be more proactive as intrapreneurs.

Iqbal, Nazir and Ahmad (2020) recorded similar result as they found that psychological availability enhances the relationship between leadership and employee's creativity. They further explained that, psychological availability environment depends on how leaders open a leader is. Their openness would enhance the trust employees have in hi which would improve the beliefs that individual employees has in relation to their physical, emotional and cognitive resource to engage in work. These would eventually influence the level of innovation and creative among employees which is considered as employee intrapreneurial behaviour.

Psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour

The fourth objective of the study was to analyse the mediating role of psychological safety on the relationship between leader trustworthiness and intrapreneurial behaviour. The result was presented on Table 13.

Table 13: Psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour

	Path	T-stats	Sig
Leader Trustworthiness -> Psychological Safety -> Intrapreneurial Behaviour	0.264	4.050	0.000

Source: Field Survey (2022)

From Table 13, psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour of employees of manufacturing firms. The direct relationship between the leader trustworthiness and intrapreneurial behaviour was insignificant. However, the indirect relationship between the leader trustworthiness and intrapreneurial behaviour through psychological safety was significant [$B=0.264$; $t(291) = 4.050$; $p < 0.05$]. This shows that, psychological safety had a full mediating role in the relationship between leaders' trustworthiness and intrapreneurial behaviour.

The results showed that psychological safety mediated the relationship between leaders' trustworthiness and employee intrapreneurial behaviour. The results of this study indicate that psychological safety plays a crucial role in facilitating the positive impact of leaders' trustworthiness on employee intrapreneurial behaviour. Trust in the leader creates an environment that allows employees to fully express themselves and boosts their self-confidence,

leading to enhanced self-actualization and the ability to engage in intrapreneurial activities in the course of performance. This is because, conducive and safe environment after an employee expresses himself or herself would enable the employees to have a special trust in the leader.

Employees would feel that, their leader would not penalize them when they express their new way of undertaking their tasks. On the other hand, trusted leaders would allow employees to share their new ways of undertaking their tasks with him. This would also create a conducive and safe environment where employees would be able to express their concerns, ideas and even their mistakes. The level of employee's intrapreneurial would also be improved since allowing employees.

Norden (2020) found leader trustworthiness positively correlates with psychological safety of employees which instils employees' confidence at workplace and are more likely to challenge conventional thoughts and behaviours as well as posit novel strategies to various work related issues which strengthen employees' intrapreneurial behaviour. Monoor (2020), contributes that when leaders are open, approachable, and trustworthy this makes employees feel psychologically safe which allow them to be more proactive and propose novel and creative ideas. Marijke, Okyireh, Siddique, and Owusu-Okyireh (2021) posit that psychological safety stimulates a sense of vigour and influences employees' contribution to creativity and inovativeness. This indicate that when there is a favourable psychological safe atmosphere, employees are willing to give constructive suggestions within an organisation base on how to improve their services, products and process of doing things.

Psychological safety therefore enables people to engage in activities and connections that foster good growth and inspire intrapreneurial behaviour (Wanless, 2016). According to Gilson and Shalley (2004) psychological safety serves as a safety net that helps alleviate employees' fears about being seen adversely by others, which might inspire them to present unique ideas or strive to change the status quo and, be involved in creative and innovative activities.

This study's results is consistent with Ahmad, Mahmoud, and Posspowijoyo (2021) who the leadership behaviour would improve an environment open for brainstorming and sharing of ideas with no fear attached. They further explained that, an environment which allows employees to commit share ideas without been penalized would permit them to try new ideas which would improve their level of intrapreneurial behaviour.

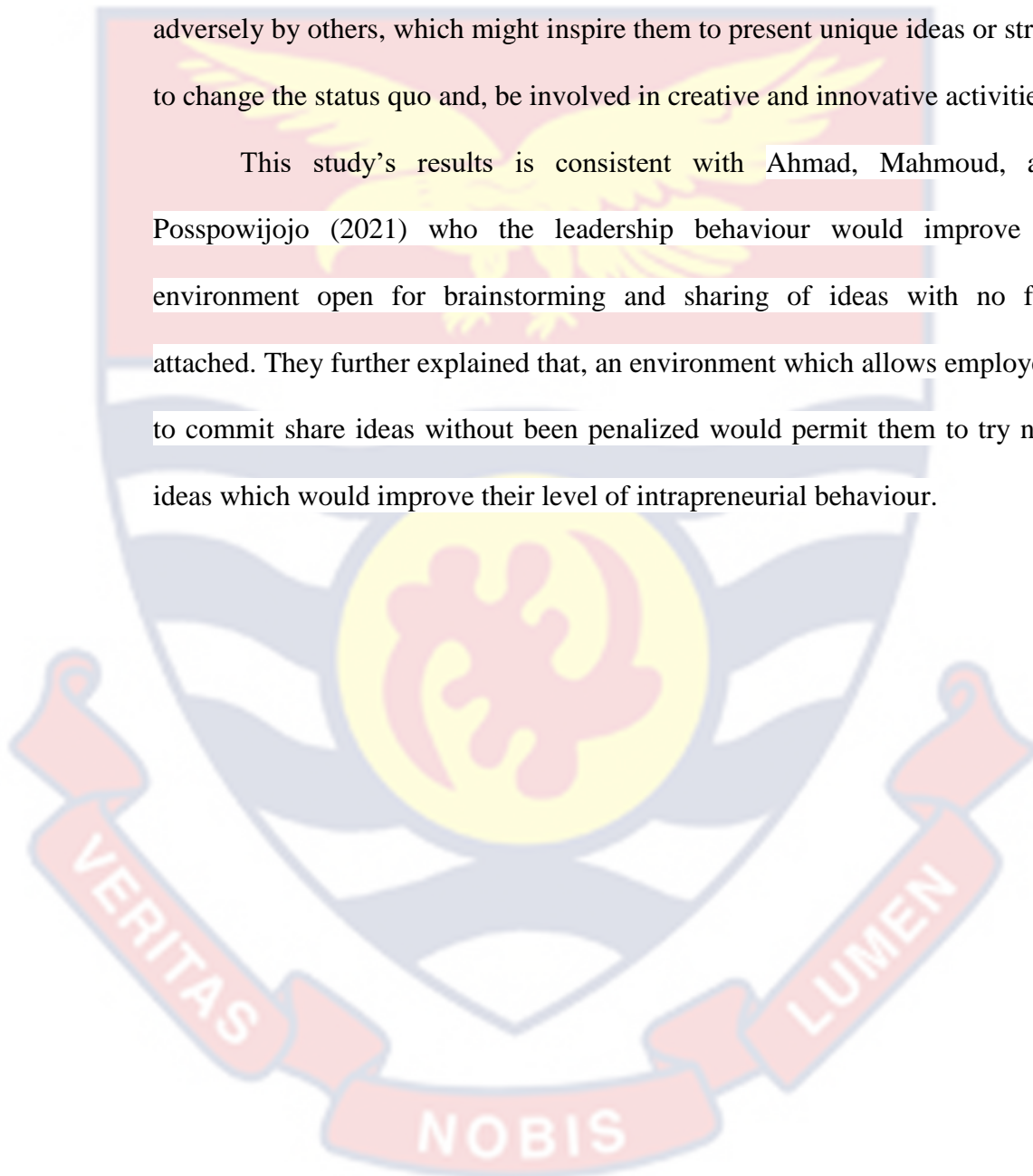


Table 14: Significance of hypothesised paths and effect size

Hypothesis	Path	Path coefficient (β)	T-value	P-value	f ²	Decision
H1	LT → IB	0.056	0.868	0.386	0.003	Not supported
H2	LT → PS	0.829	39.330	0.00	2.205	Supported
H3	LT → PA	0.701	17.280	0.000	0.966	Supported
H4	PS → IB	0.319	4.072	0.000	0.079	Supported
H5	PA → IB	0.519	7.229	0.000	0.343	Supported
H6	LT → PS → IB	0.264	4.050	0.000	-	Supported
H7	LT → PA → IB	0.364	7.655	0.000	-	Supported
Control	Gender → IB	0.113	2.275	0.023	0.016	Supported
Control	Age → IB	-0.032	0.738	0.460	0.001	Not supported
Control	WE → IB	-0.075	1.788	0.074	0.011	Not supported

Source: Field Survey (2022)

Chapter Summary

In this chapter, the study's objectives were thoroughly analysed and discussed. The chapter begun by explaining demographic characteristics of the respondents. Age, Gender, educational level and also working experience of staffs were examined. The evaluation of the reliability and validity of the indicators utilized to measure the study's variables was also conducted. The chapter also encompassed the assessment of the model used in the study. The hypotheses of the study was then tested.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Introduction

The summary, conclusions and recommendations of the study are presented in this chapter. The study was conducted to examine the leader trustworthiness and intrapreneurial behaviour: the role of psychological safety and psychological availability. This chapter begun with the summary of the study. This was followed by the conclusion and the recommendation and suggestions for further studies.

Summary

The primary objective of the study was to examine how psychological safety and psychological availability mediate the relationship between leader trustworthiness and employees' intrapreneurial behaviour from the manufacturing sector. To fulfill the study's aim, seven specific objectives and corresponding hypotheses were outlined. The specific objectives of the study were to: analyse the effect of leader trustworthiness on employees' intrapreneurial behaviour; to examine the effect of leader trustworthiness on employees' psychological safety; to analyse the effect of psychological safety on employees' intrapreneurial behaviour; to analyse the mediating role of psychological safety on the relationship between leader trustworthiness and intrapreneurial behaviour; to analyse the effect of leader trustworthiness on employees' psychological availability; to analyse the effect of psychological availability on employees' intrapreneurial behaviour and; to analyse the mediating role of psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour.

The study revolved around the incorporation of two theories. These theories were social exchange theory and psychosocial safety climate theory. The concepts of leader trustworthiness, intrapreneurial behaviour, psychological safety, and psychological availability were all explained. The conceptual framework linking the variables were also explained.

The study embraced the philosophical paradigm of positivism in the analysing the objectives of the study. Considering that the research objectives of this study aimed to test predictive-based hypotheses and required the collection of large, quantifiable data, the study employed a quantitative research approach. Furthermore, considering that the research objectives of this study aimed to provide explanations for the relationships and effects among the variables of interest, the study employed an explanatory research design.

This study was conducted within the context of manufacturing firms located in Ghana. A total of 291 respondents were included as the sample size for the study. The primary data collection tool employed was a questionnaire. Given the nature of the study's objectives, the structural equation model was utilised to analyzed and address the study's objective.

Key findings

The first objective of the study was to analyse the effect of leader's trustworthiness on employee intrapreneurial behaviour. The study revealed that there was no notable relationship between the trustworthiness of leaders and employees' intrapreneurial behaviour.

The second objective of the study was to analysed the effect of psychological safety on employees' intrapreneurial behaviour. The study

discovered a positive and substantial relationship between psychological safety and employees' intrapreneurial behaviour.

The third objective of the study was to analyse the effect of psychological availability on employee's intrapreneurial behaviour among employees of manufacturing firms. The study revealed a notable and positive correlation between psychological availability and intrapreneurial behaviour of workers in manufacturing firms.

The fourth objective of the study was to analyse the effect of leader trustworthiness on employee's psychological safety. The study found that there was a positive and significant relationship between leader trustworthiness and employees' psychological safety. This explains that, the trust employees have in their leaders would allow them to share their issues and mistakes without fear and panic.

The fifth objective of the study was to analyse the effect of leader trustworthiness and employees' psychological availability. The study found that there was a positive and significant relationship between leader trustworthiness and employee psychological availability.

The sixth objective of the study was to analyse the mediating role of psychological safety on the relationship between leader trustworthiness and employee intrapreneurial behaviour. The study found that there was a full mediation of psychological safety on the relationship between leader trustworthiness and employee intrapreneurial behaviour.

Finally, the seventh objective of the study was to analyse the mediating role of psychological availability on the relationship between leader trustworthiness and intrapreneurial behaviour of manufacturing firms. The

study found that psychological availability had a full mediating role on the relationship between leader trustworthiness and intrapreneurial behaviour.

Conclusions

Drawing from the study's findings, the following conclusions were derived:

First, leader trustworthiness do not affect employees' intrapreneurial behaviour of manufacturing firms. These findings challenge the commonly held belief that trust in leaders is a crucial factor in fostering an environment conducive to intrapreneurship. The study suggests that other factors might play a more significant role in influencing employee intrapreneurial behaviour, such as organisational culture, resources, incentives, or individual motivation.

Secondly, psychological safety is positively related to intrapreneurial behaviour among employees of the manufacturing firms. When employees feel psychologically safe, they are more likely to feel confident in sharing their ideas and suggestions, knowing that their contributions will be valued and respected. This creates an environment that encourages innovation and risk-taking, as employees are not afraid of negative repercussions for their entrepreneurial efforts.

Thirdly, psychological availability is positively related to employees' intrapreneurial behaviour among employees of the manufacturing firms. Employees who reported higher levels of psychological availability exhibited greater intrapreneurial behaviour, including proactive problem-solving, innovation, and risk-taking within their roles.

In addition, leader trustworthiness is positively related to psychological safety among employees of the manufacturing firms. The perception of psychological safety among employees is significantly influenced by the

trustworthiness of leaders. within the workplace. When employees observe their leaders as trustworthy, it fosters an environment of psychological safety, in an environment where individuals experience a sense of ease or comfort expressing themselves, taking risks, and engaging in open communication without experiencing apprehension about adverse outcomes.

Also, leader trustworthiness is positively related to employees' psychological availability among employees of the manufacturing firms. The research also revealed that trustworthiness of leaders in manufacturing firms served as one of the factors that contribute to psychological availability.

In addition, psychological safety mediates the relationship between leader trustworthiness and intrapreneurial behaviour among employees of the manufacturing firms. When employees perceive their leaders as trustworthy, it fosters a sense of psychological safety within the work environment. This psychological safety, in turn, encourages employees to engage in intrapreneurial behaviour, which involves taking initiative, being innovative, and taking risks within the organisation.

Lastly, psychological availability mediates the relationship between leader trustworthiness and intrapreneurial behaviour among employees of the manufacturing firms. The mediating role of psychological availability suggests that it acts as an intermediate factor through which leader trustworthiness influenced intrapreneurial behaviour. Leader trustworthiness influenced employees' perceptions of psychological availability, which, in turn, influences their level of involvement or commitment in intrapreneurial behaviour.

Recommendation

In light of the results, the following recommendation and suggestions were put forward:

1. Organizations aiming to establish intrapreneurship as a norm should offer significant assistance and relevant training to managers, enabling them to effectively support and foster intrapreneurial activities. This will give non-intrapreneurial employees an understanding of how intrapreneurs think and operate, as well as the conditions under which intrapreneurs will thrive within an organisation.
2. Managers and supervisors are to improve their leadership skills to promote intrapreneurial behaviour. Employee's intrapreneurial behaviour can be improved when employees are not punished or humiliated for speaking up with ideas, questions, concerns and mistakes. Creating such environment would enhance employee's creativity and innovativeness.
3. Business owners and manager in manufacturing industries should focus on creating a positive and inclusive work environment that encourages open communication, collaboration, and knowledge sharing. This can be achieved through team-building activities, recognition programs, and promoting a culture of trust and respect that would help contribute to employees intrapreneurial behaviour.
4. Leaders in manufacturing firms should provide employees with opportunities for continuous learning and skill development. This can include training programs, workshops, mentoring, and job rotations that enable employees to acquire new knowledge and skills, fostering

their sense of competence and self-efficacy to enhance employees' intrapreneurial behaviour of employees'.

5. To guarantee the realization of leaders' vision in manufacturing firms and prevent stagnation, it is crucial to effectively execute that vision.

This enables organisations to harness the ideas and innovations that emerge from within their own workforce. Persistence is vital throughout this process, and leaders and managers must maintain strong connections to ensure that intrapreneurs maintain their enthusiasm and do not become disheartened by corporate constraints.

6. The hierarchical and political structure of large, complex organisations often discourages employees from taking risks. However, establishing an engaged leadership team that actively participates in the intrapreneurial process is crucial for the success of such initiatives within these organisations. By placing employees at the forefront of these initiatives and fostering a culture of intrapreneurship, manufacturing firms can transition towards a more innovative and entrepreneurial approach.

7. Business owners, managers, and leaders in manufacturing firms should prioritize the significance of social exchange processes in fostering employees' intrapreneurial behaviours. Employees engage in reciprocal exchanges, where they reciprocate positive practices and behaviours when they receive favorable treatment from the organisation. To encourage this reciprocal behaviour, it is essential to establish a nurturing environment that promotes employees' comfort and well-being. By providing employees with highly achievement-oriented tasks

and more challenging missions that involve novelty, coupled with delivering prompt feedback on their performance and taking corrective actions when needed, organisations can foster an environment conducive to employee growth and development.

Suggestions for future studies

The following suggestions for future studies will inspire researchers, scholars, and practitioners to continue building upon the foundation laid by the current research. This study provides several valuable contributions; however, it is important to acknowledge and address certain limitations that warrant consideration.

First, the use of a simple random research design in this study may limit the ability to establish causal relationships between leaders' trustworthiness, psychological safety and psychological availability, and employee intrapreneurial behaviour. To further investigate these mediating effects, future studies could employ longitudinal research designs or experiments for retesting purposes.

Second, the process of gathering data for this study was limited to a small number of manufacturing firms, which could potentially limit the generalizability of the findings. To enhance the robustness and generalizability of the conclusions, future studies should consider collecting data from multiple firms across different industries

Thirdly, the study was specifically conducted in the context of Ghana, which is characterised by a relatively high power distance and collectivism. In such a context, leaders may be more inclined to share private information, such as authentic feelings and thoughts, with employees who have a high-

quality relationship with them compared to out-group employees. Therefore, it is important for future studies to consider certain boundary conditions, such as leader-member exchange quality and perceived insider status.



REFERENCES

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell and Larcker criterion versus HTMT criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). Publishing.
- Ablakah-Yawson, R. M. (2018). Complex adaptive leadership for organisation and human development. In *Proceedings of the 55th Annual Eastern Academy of Management Conference, Providence, RI*.
- Aboramadan, M., & Kundi, Y. M. (2022). Emotional culture of joy and happiness at work as a facet of wellbeing: a mediation of psychological safety and relational attachment. *Personnel Review*. <https://doi.org/10.1108/pr-04-2021-0285>.
- Aboramadan, M., Hamid, Z., Kundi, Y. M., & El Hamalawi, E. (2022). The Effect of Servant Leadership on Employees' Extra-Role Behaviours. The Role of Work Engagement. *Nonprofit Management and Leadership*, 33(1), 109-129.
- Addo, E. O. (2017). The impact of manufacturing industries on Ghana's economy. *International Journal Resource Studies Management*, 6, 73-94.
- Adu-Gyamfi, J., & Chipwere, K. Y. W. (2020). The impact of management accounting practices on the performance of manufacturing firms: An empirical evidence from Ghana. *Research Journal of Finance and Accounting*, 11(20), 100-113.

- Adu-Gyimah, M. (2016). Transformational leadership skills needed by private basic school proprietors in Ghana. *ProQuest Dissertations and Theses*, 183 <https://search.proquest.com/docview/1826318099?accountid=9645>.
- Afriyie, N. (2020). The influence of employee self-efficacy, outcome expectation and firm resources on intrapreneurial behaviour: insight from Ghana. *Athens Journal of Business & Economics*, 6(4), 349–376.
- Agarwal, P., & Farndale, E. (2017). High-performance work systems and creativity implementation: the role of psychological capital and psychological safety. *Human Resource Management Journal*, 27(3), 440-458.
- Agote, L., Aramburu, N., & Lines, R. (2016). Authentic leadership perception, trust in the leader, and followers' emotions in organisational change processes. *The Journal of Applied Behavioural Science*, 52(1), 35-63.
- Ajibolade, S. O. (2013). Management accounting systems design and company performance in Nigerian manufacturing companies: A contingency theory perspective. *British Journal of Arts and Social Sciences*, 14(2), 228-244.
- Ajibolade, S., (2019). The influence of stakeholders on management accounting practice. *Journal of Sustainable Finance and Investment*, 9(4), 295-324.
- Alam, M. Z., Nasir, N., & Rehman, C. A. (2020). Intrapreneurship concepts for engineers: a systematic review of the literature on its theoretical foundations and agenda for future research. *Journal of Innovation and Entrepreneurship*, 9(1), 1-21.

- Alghamdi, A. H., & Li, L. (2013). Adapting design-based research as a research methodology in educational settings. *International Journal of Education and Research*, 1(10), 1-12.
- Alghamdi, M. A., Hussain, N., & Salimi, P. (2013). Fixed point and coupled fixed point theorems on b-metric-like spaces. *Journal of Inequalities and Applications*, 2013, 1-25.
- Ali, A., Wang, H., & Johnson, R. E. (2020). Empirical analysis of shared leadership promotion and team creativity: An adaptive leadership perspective. *Journal of Organisational Behaviour*, 41(5), 405-423.
- Alzyoud, S. Y. (2019). Psychological safety and employee innovation in four- and five-star hotels in the United Kingdom (Doctoral Dissertation, Manchester Metropolitan University).
- Amponsah-Tawiah, K., Boateng, A. K., & Tetteh, S. D. (2020). Safety climate and employees' voluntary work behaviours: the moderating role of employees' voice. *International Journal of Workplace Health Management*, 13(5), 561–581. <https://doi.org/10.1108/IJWHM-05-2019-0078>.
- Anand, C. (2020). The role of leaders and intrapreneurial employees in large technology corporations: A qualitative study (Doctoral dissertation, University of Bradford).
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.

- Ansong, A., & Agyemang, O. S. (2016). Firm reputation and financial performance of SMEs: The Ghanaian perspective. *European Meditate Journal of Management*, 1(3), 237-251.
- Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7-24.
- Antwi, C. O., Fan, C. J., Aboagye, M. O., Brobbey, P., Jababu, Y., Affum-Osei, E., & Avornyo, P. (2019). Job demand stressors and employees' creativity: A within-person approach to dealing with hindrance and challenge stressors at the airport environment. *The Service Industries Journal*, 39(3-4), 250-278.
- Aranzamendez, G., James, D., & Toms, R. (2015). Finding antecedents of psychological safety: A step toward quality improvement. In *Nursing forum* (Vol. 50, No. 3, pp. 171-178).
- Arunga, H. J. (2017). Organisational antecedents to intrapreneurship: Kenya pharmaceutical industry (Doctoral Dissertation, United States International University-Africa).
- Association of Ghana Industries (2013). Industrial Development in Ghana. *International Growth Centre (IGC)*.
- Atatsi, E. A., Azila-Gbettor, E. M., & Mensah, C. (2021). Predicting task performance from psychological ownership and innovative work behaviour: A cross sectional study. *Cogent Business and Management*, 8(1), 1917483.
- Ayodele, A. S., & Falokun, G. O. (2003). The organisation: Structure and pattern of development. *JODAD*.

- Azuyie, R. (2020). Effect of entrepreneurial knowledge on the entrepreneurial intentions of student of Kumasi Technical University (Doctoral dissertation, University of Cape Coast).
- Baafi, F., Ansong, A., Dogbey, K. E., & Owusu, N. O. (2021). Leadership and innovative work behaviour within Ghanaian metropolitan assemblies: mediating role of resource supply. *International Journal of Public Sector Management*, 34(7), 765-782.
- Bagozzi, R. P., & Yi, Y. (2019). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bakari, H., Niaz, M., Zhang, Q., Liu, D., & Shah, I. A. (2022). Impact of managerial trustworthy behaviour on employee engagement: Mediating role of perceived insider status. *Frontiers in Psychology*, 4040.
- Bakker, A. B. (2022). The Social Psychology of Work Engagement: State Of The Field. *Career Development International*.
- Bakker, P., & Dollard, M. F. (2012). Psychosocial safety climate: A lead indicator of workplace psychological health and engagement and a precursor to intervention success. In *Improving Organisational Interventions for Stress and Well-Being* (pp. 103-127). Routledge.
- Basit, A. A. (2017). Trust in supervisor and job engagement: Mediating effects of psychological safety & felt obligation. *The Journal of Psychology*, 151(8), 701-721. DOI: 10.1080/00223980.2017.1372350.

- Basso, O. (2010). 'Intrapreneurship': Corporate entrepreneurship developing an entrepreneurial dynamic within large businesses. *Handbook of top management teams*, 460–468. <https://doi.org/10.1057/978023030533554>.
- Bedarkar, M., & Pandita, D. (2014). A study on the drivers of employee engagement impacting employee performance. *Procedia-Social and Behavioural Sciences*, 133, 106-115.
- Bell, C. M., Khan, A. K., & Quratulain, S. (2022). Interpersonal justice and creativity: testing the underlying cognitive mechanisms. *Management Research Review*.
- Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to Perform and Report an Impactful Analysis using Partial Least Squares: Guidelines for Confirmatory and Explanatory iS Research. *Information and Management*, 57(2), 103168.
- Bergman, S., & Williamsson, V. (2020). *Impact of passive leadership on intrapreneurial behaviour A case study from the employee perspective*. Stockholm Business School.
- Bidault, F., & Castello, A. (2009). Trust and creativity: understanding the role of trust in creativity-oriented joint developments. *Resource and Development Management*, 39(3), 259-270.
- Bienefeld, N., & Grote, G. (2012). *Silence that may kill*. *Aviation psychology and applied human factors*, 2 (1), 1–10.

- Bilal, A., Ahmad, W., Jan, M. F., Huseynov, R., & Nagy, H. (2021). How women's transformational leadership induces employees' innovative behaviour through trust and connectivity: A sequential mediation model. *Global Business Review*, 0972150920982760. <https://doi.org/10.1177/0972150920982760>.
- Blanka, C. (2019). An individual-level perspective on intrapreneurship: a review and ways forward. *Review of Managerial Science*, 13(5), 919-961.
- Blau, P. M. (1964). *Social Exchange theory*. New York: Wiley.
- Blau, P. M. (1968). Social exchange. *International Encyclopedia of the Social Sciences*, 7(4), 452-457.
- Bligh, M. C. (2017). Leadership & trust. In *Leadership today* (pp. 21-42). Springer, Cham.
- Blumberg, B., Cooper, D., & Schindler, P. (2014). *EBOOK: Business Research Methods*. McGraw Hill.
- Boakye, E. A., (2017). Emerging research on blockchain technology in finance; conveyed evidence of bibliometric-based evaluations. *The Journal of High Technology Management Research*, 33(2), 100437.
- Boccoli, G., Gastaldi, L., & Corso, M. (2022). The impact of social support on performance extra-role in a remote working context: the mediating role of work engagement. In 29th Innovation and Product Development Management Conference (IPDMC) "Innovation in the Era of Climate Change" (pp. 1-18).

- Bosompem, J., He, Z., Okae-Adjei, S., Asante Boadi, E., Antwi, C. O., Atuobuah Boadi, V., & Asare-Kyire, L. (2019). Social entrepreneurs and employee green behaviour: value systems and social context as moderators. *Journal of Environmental Planning and Management*, 1-23.
- Bour, K. B., Asafo, A. J., & Kwarteng, B. O. (2019). Study on the effects of sustainability practices on the growth of manufacturing companies in urban Ghana. *Heliyon*, 5(6), e01903.
- Bradley, B. H., Klotz, A. C., Hamdani, B. E., Klotz, B. E., & Postlethwait, K. G. (2013). Ready to rumble: How team personality composition and task conflict interact to improve performance. *Journal of Applied Psychology*, 98(2), 385.
- Bryman, A. (2020). Social Research methods in the study of leadership. Oxford University Press. *The SAGE handbook of leadership*, 15-28.
- Byrne, B. M. (2013). Structural equation modeling with Mplus: Basic Concepts, Applications, and Programming. *Routledge*.
- Byrne, Z. S., Peters, J. M., & Weston, J. W. (2016). The struggle with employee engagement: Measures and construct clarification using five samples. *Journal of Applied Psychology*, 101(9), 1201.
- Caniels, M. C., Neessen, P. C., de Jong, J. P., & Vos, B. (2021). Circular purchasing in Dutch and Belgian organisations: The role of intrapreneurship and organisational citizenship behaviour towards the environment. *Journal of Cleaner Production*, 280, 124978.

Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260.

Carpini, J. A., & Gagne, M. (2013). Predicting employee performance and turnover intentions: Leader trustworthiness and the mediating role of autonomous motivation. *PsycEXTRA Dataset*.

Carrion, G. C., Nitzl, C., & Roldán, J. L. (2017). Mediation analyses in partial least squares structural equation modeling: Guidelines and empirical examples. In *Partial least squares path modeling* (pp. 173-195). Springer, Cham.

Carter, M., & Tamayo, A. (2017). Entrepreneurial and intrapreneurial skills of managers as determinant of organisational performance of small and medium enterprises in davao region, philippines. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2927916>.

Cassel, C., Hackl, P., & Westlund, A. H. (1999). Robustness of partial least-squares method for estimating latent variable quality structures. *Journal of Applied Statistics*, 26(4), 435-446.

Castanelli, D. J., Weller, J. M., Molloy, E., & Bearman, M. (2022). How trainees come to trust supervisors in workplace-based assessment: a grounded theory study. *Academic Medicine*, 97(5), 704-710. <https://doi.org/10.1097/acm.0000000000004501>.

Centene, A., (2021). Collaborative learning. *International Journal of English Learning & Teaching Skills*, 3(4), 2567-2576.

- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Christian, N., Oguegbe, T. M., & Ogbonnaya, C. E (2019). Psychological availability, psychological safety and optimism as predictors of innovative behaviour among workers.
- Clark, T. R. (2020). *The 4 stages of psychological safety: Defining the path to inclusion and innovation*. Berrett-Koehler Publishers.
- Clarke, S. (2010). An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. *Journal of Occupational and Organisational Psychology*, 83(3), 553–578. <https://doi.org/10.1348/096317909x452122>.
- Colquitt, J. A., Zipay, K. P., Lynch, J. W., & Outlaw, R. (2018). Bringing “the beholder” center stage: on the propensity to perceive overall fairness. *Organisational Behaviour and Human Decision Processes*, 148, 159-177.
- Cooper, D., Blumberg, B., & Schindler, P. (2014). *EBOOK: Business Research Methods*. McGraw Hill.
- Crano, W. D., Brewer, M. B., & Lac, A. (2014). Principles and methods of Social Research. *Routledge*.
- Creswell, J. E., Clark, V. L. P., & Matkin, G. S. (2010). Applying mixed methods to leadership research: A review of current practices. *The Leadership Quarterly*, 23(6), 1173-1183.
- Creswell, J. W. (2009). Research designs: Qualitative, Quantitative, & Mixed Methods Approaches. *California: Sage*.

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. *Sage publications*.

Creswell, J. W., Shope, R., Plano Clark, V. L., & Green, D. O. (2012). How interpretive qualitative research extends mixed methods research. *Research in the Schools, 13*(1), 1-11.

Davidson, M. (2020). The impact of psychological safety congruence on safety citizenship in healthcare organisations. *Academy of Management Proceedings, 2020*(1), 14498. <https://doi.org/10.5465/ambpp.2020.14498abstract>.

Davies, H., Karr, L.. (2020). The impact of management accounting practices on the performance of manufacturing firms: An empirical evidence from Ghana. *Research Journal of Finance and Accounting, 11*(20), 100-113.

De-Jong, S., & Hartog, W. (2018). Person-organisation fit, person-job fit, and innovative work behaviour: the role of organisational citizenship behaviour. *European Research Studies, 21*, 389-402.

Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The leadership Quarterly, 14*(6), 729-768.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of Applied Psychology, 87*(4), 611.

Doku, R. B. Rawat, D., & Chaudhary, V., (2020). Blockchain technology: emerging applications and use cases for secure and trustworthy smart systems. *Journal of Cybersecurity and Privacy, 1*(1), 4-18.

Dolland, G. L., & Matthews, A. (2012). Handbook of Lubrication and Tribology, Volume II.

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of occupational and organisational psychology*, 83(3), 579-599.

Donkor, F., Dongmei, Z., & Sekyere, I. (2021). The mediating effects of organisational commitment on leadership styles and employee performance in in Ghana: A structural equation modeling analysis. *Sage Open*, 11(2), 21582440211008894.

Edmondson, A. (1999). Psychological safety and learning behaviour in work teams. *Administrative Science Quarterly*, 44(2), 350-383.

Edmondson, A. (2000). Psychological safety & learning behaviour in work teams. *Administrative Science Quarterly*, 44(2), 350-383. <https://doi.org/10.2307/2666999>.

Edmondson, A. C, (2004). Psychological safety, trust, and learning in organisations: a group-level lens. *Trust and distrust in organisations: Dilemmas and approaches*, 12(2004), 239-272.

Edmondson, A. C. (2018). The fearless organisation: Creating Psychological safety in the workplace for learning, innovation, and growth. John Wiley and Sons.

Edmondson, A. C., & Mogelof, J. P. (2006). Explaining psychological safety in innovation teams: organisational culture, team dynamics, or personality?. In *creativity and innovation in organisational teams* (pp. 129-156). Psychology Press.

Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organisations: a group-level lens. *trust and distrust in organisations: Dilemmas and Approaches*, 12(2004), 239-272.

Edmondson, J. L. (2021). Increasing city resilience through urban agriculture: Challenges and Solutions in the Global North. *Sustainability*, 13(3), 1465.

Edmonson, H. M. (2000). A study of the process of the implementation of school reform in an urban middle school using positive behavioural supports: "not one more thing". University of Kansas.

Eggers, F. (2020). Masters of disasters? challenges and opportunities for firms in times of crisis. *Journal of Business Research*, 116, 199-208.

Eggers, J. T. (2011). Psychological safety influences relationship behaviour. *Corrections Today*, 73(1), 60-61.

Elsaied, M. M. (2019). Supportive leadership, proactive personality and employee voice behaviour: the mediating role of psychological safety. *American Journal of Business*, 34(1), 2-18.

Erkutlu, H., & Chafra, J. (2016). Benevolent leadership and psychological well-being: the moderating effects of psychological safety and psychological contract breach. *Leadership and Organisation Development Journal*.

Farrukh, M., Meng, F., & Raza, A. (2021). Believe they can Succeed, and they will: Intrapreneurial Behaviour and Leadership. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-10-2020-0393>.

- Farrukh, M., Ying, C. W., & Mansori, S. (2016). Intrapreneurial Behaviour: An Empirical Investigation of Personality Traits. *Management and Marketing. Challenges for the Knowledge Society*, 11(4), 597-609.
- Ferguson, H. (2018). How Social Workers Reflect in Action and When and Why They do not: The Possibilities and Limits to Reflective Practice in Social Work. *Social Work Education*, 37(4), 415-427.
- Fjermedal, B. N, (2020) "Employee Participation in the Workplace: The Effects of Inclusive Leadership and Team Psychological Safety." Master's Thesis.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: *algebra and statistics*.
- Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). psychological safety: a meta-analytic review and extension. *Personnel Psychology*, 70(1), 113-165.
- Fulmer, C. A., & Ostroff, C. (2017). Trust in direct leaders and top leaders: a trickle-up model. *Journal of Applied Psychology*, 102(4), 648–657. <https://doi.org/10.1037/apl0000189>.
- Gatti, T. (2016). The role of psychological states in predicting work engagement : *A test of Kahn's Model*. *ScholarWorks Master's*, 2(12), 4722.
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behaviour*, 100, 88-100.
- Ghana Statistical Service (2014). The impact of manufacturing industries on Ghana's Economy.

Ghana Statistical Service (2015). The impact of manufacturing Industries on Ghana's economy.

Ghana Statistical Service (2016). The impact of manufacturing industries on Ghana's economy.

Ghana Statistical Service (2017). The impact of manufacturing industries on Ghana's economy.

Ghana Statistical Service (2018). The impact of manufacturing industries on Ghana's economy.

Ghana Statistical Service (2019). The impact of manufacturing industries on Ghana's economy.

Ghana Statistical Service (2020). The impact of manufacturing industries on Ghana's economy.

Giles, S. (2016). The most important leadership competencies, according to leaders around the world. *Harvard Business Review*, 15(03).

Gnankob, R. I., Ansong, A., & Issau, K. (2022). Servant leadership and organisational citizenship behaviour: the role of public service motivation and length of time spent with the leader. *International Journal of Public Sector Management*.

Gong, P., Liang, S., Carlton, E. J., Jiang, Q., Wu, J., Wang, L., & Remais, J. V. (2012). Urbanisation and Health in China. *The Lancet*, 379(9818), 843-852.

Gong, Z. X., Xu, Z., & Gilal, F. G. (2019). Ethical climate and service behaviours in nurses: The moderating role of employment type. *Journal of advanced nursing*, 75(9), 1868-1876.

Gouda, G. K., & Tiwari, B. (2021). Talent agility, innovation adoption and sustainable business performance: empirical evidences from Indian automobile industry. *International Journal of Productivity and Performance Management*.

Guo, Z., & Jiang, W. (2020). Risk-taking for entrepreneurial new entry: risk-taking dimensions and contingencies. *International Entrepreneurship and Management Journal*, 16(2), 739-781.

Gupta, R., and Hershey, D. A. (2019). Time perspective as an antecedent of trust in a manager and its impact on employee attitudes. *Time and Society*, 28(1), 124-152.

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., and Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): *An emerging tool in Business Research*. *European Business Review*.

Hair Jr, J., Sarstedt, M., Hopkins, L., & S. G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in Business Research. *European Business Review*, 26(2), 106-121.

Hair Jr, Joe F., Lucy M. Matthews, Ryan L. Matthews, & Marko Sarstedt. "PLS-SEM or CB-SEM: updated guidelines on which Method to use." *International Journal of Multivariate Data Analysis* 1, no. 2 (2017): 107-123.

- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2019). An updated and expanded assessment of pls-sem. in information systems research. *Industrial Management and Data Systems*.
- Hair, P. S., Crawford, K. B., Gronemus, J. Q., Nyalwidhe, J. O., Cunnion, K. M., & Krishna, N. K. (2010). Potent inhibition of the classical pathway of complement by a novel c1q-binding peptide derived from the human astrovirus coat protein. *Molecular Immunology*, 48(1-3), 305-313.
- Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial safety climate. *International Journal of Stress Management*, 17(4), 353.
- Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-448.
- Hansen, S. D., Alge, B. J., Brown, M. E., Jackson, C. L., & Dunford, B. B. (2013). Ethical leadership: assessing the value of a multifoci social exchange perspective. *Journal of Business Ethics*, 115, 435-449.

- Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organisational agility—A qualitative exploration. *Human Resource Management, 59*(1), 43-61.
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., & Calantone, R. J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). *Organisational research methods, 17*(2), 182-209.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135.
- Heyns, M., & Rothmann, S. (2018). Volitional trust, autonomy satisfaction, and engagement at work. *Psychological Reports, 121*(1), 112-134.
- Hisrich, Robert D. "Entrepreneurship/intrapreneurship." *American Psychologist* 45.2 (1990): 209.
- Hiwarkar, A. S. (2019). Importance of intrapreneurship. *Journal of Emerging Technologies and Innovative Research, 6*(1), 351–357. <http://www.jetir.org/view?paper=JETIR1901A44>.
- Holmes, K. A., & Rempel, G. (2015). Trust and belonging in individual and organisational relationships. in *strategic corporate communication in the digital age. Emerald Publishing Limited.*
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.

- Hunter, S. T., Farr, J. L., Heinen, R. L., & Allen, J. B. (2019). Integrating creative climate and creative problem-solving. In *Creativity and Innovation in Organisations* (pp. 137-160). *Routledge*.
- Idris, M. A., Dollard, M. F., Coward, J., & Dormann, C. (2012). Psychosocial safety climate theory: Conceptual Distinctiveness and effect on Job Demands and Worker Psychological Health. *Safety Science*, 50(1), 19-28.
- Iqbal, A., Nazir, T., & Ahmad, M. S. (2020). Entrepreneurial leadership and employee innovative behaviour: an examination through multiple theoretical lenses. *European Journal of Innovation Management*, 25(1), 173-190.
- Ismaila, S. (2021). Employee engagement and performance of microfinance banks in ilorin metropolis (Doctoral dissertation, Kwara State University (Nigeria)).
- Javed, B. (2018). The positive psychological states and innovative work behaviour: the role of relational leadership. 1–203. <https://cust.edu.pk/static/uploads/2019/08/PhD-Mngt.-Sc.-Thesis-Basharat-Javed.pdf>.
- Javed, B., Naqvi, S. M. M. R., Khan, A. K., Arjoon, S., & Tayyeb, H. H. (2019). Impact of inclusive leadership on innovative work behaviour: the role of psychological safety. *Journal of Management and Organisation*, 25(1), 117-136.
- Jeon, E. H. (2015). Multiple Regression in advancing quantitative methods in second language research (pp. 131-158). *Routledge*.

- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kapin, D. (2019). Thinking with feeling: social intelligence and leadership (Doctoral dissertation).
- Kelloway, E. K. (1998). *Using LISREL for Structural Equation Modeling: A Researcher's Guide*. Sage.
- Kessel, M., Kratzer, J., & Schultz, C. (2012). Psychological safety, knowledge sharing, and creative performance in healthcare teams. *Creativity and Innovation Management*, 21(2), 147-157.
- Khan, A. K., Bell, C. M., & Quratulain, S. (2022). Interpersonal justice and creativity: testing the underlying cognitive mechanisms. *Management Research Review*.
- Kim, M. Y., Park, S. M., & Miao, Q. (2017). Entrepreneurial leadership and organisational innovation: improving attitudes and behaviours of Chinese public employees. *Public Service Innovations in China*, 151-184.
- Kim, N.D, Nguyen, D. T., Teo, S. T., Halvorsen, B., & Staples, W. (2020). Leader humility and knowledge sharing intention: a serial mediation model. *Frontiers in Psychology*, 11, 560704.
- Klassen, A. C., Creswell, J., Plano Clark, V. L., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. *Quality of life Research*, 21(3), 377-380.

- Kleynhans, D. J., Heyns, M. M., Stander, M. W., & de Beer, L. T. (2022). Authentic leadership, trust (in the leader), and flourishing: does precariousness matter?. *Frontiers in Psychology, 13*, 798759-798759.
- Ko, J., & Hur, S. (2014). The impacts of employee benefits, procedural justice, and managerial trustworthiness on work attitudes: *integrated understanding based on social exchange theory. Public Administration Review, 74*(2), 176-187.
- Kock, A. (2013). An empirical investigation on how portfolio risk management influences project portfolio success. *International Journal of Project Management, 31*(6), 817-829.
- Kock, N., & Lynn, G. (2012). Lateral collinearity & misleading results in variance-based sem: an illustration and recommendations. *Journal of the Association for Information Systems, 13*(7).
- Koomson, S. (2021). Psychological contract breach and organisational citizenship behaviour: the role of work attitudes and personality traits among medical doctors in Ghana (Doctoral Dissertation, University of Cape Coast).
- Koopmann, J., Lanaj, K., Bono, J., & Campana, K. (2016). Daily shifts in regulatory focus: the influence of work events and implications for employee well-being. *Journal of Organisational Behaviour, 37*(8), 1293-1316.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610.

Kristian, K. (2015). Entrepreneurship to intrapreneurship: intrapreneurial behaviour at individual. *Archives of Business Research*, 3(2). <https://doi.org/10.14738/abr.32.880>.

Kumar, N. J., & Dhar, R. L. (2017). The influence of servant leadership, trust in leader and thriving on employee creativity. *Leadership and amp; Organisation Development Journal*, 38(1), 2–21. <https://doi.org/10.1108/lodj-02-2015-0017>.

Kumar, S., & Parveen, R. (2021). Assessing the factors of employees' intrapreneurial behaviour: an Indian context. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(4), 804–821. <https://doi.org/10.1108/WJEMSD-12-2020-0160>.

Kurniawaty, K., Ramly, M., & Ramlawati, R. (2019). The effect of work environment, stress, and job satisfaction on employee turnover intention. *Management Science Letters*, 9(6), 877-886.

Kyei-Frimpong, M., Adu, I. N., Suleman, A. R., & Boakye, K. O. (2022). In search of performance-oriented leadership behaviours in the Ghanaian financial service sector: the role of knowledge sharing. *Journal of Work-Applied Management*.

Lee, A., Legood, A., Hughes, D., Tian, A. W., Newman, A., & Knight, C. (2020). Leadership, creativity and innovation: A meta-analytic review. *European Journal of Work and Organisational Psychology*, 29(1), 1-35.

Lee, E., Kang, M., Kim, Y., & Yang, S. U. (2022). Exploring the interrelationship and roles of employee–organisation relationship outcomes between symmetrical internal communication and employee

job engagement. *Corporate Communications: An International Journal*, 27(2), 264-283.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research* (Vol. 108). Saddle River, NJ, USA: Pearson Custom.

Li, A. N., & Tan, H. H. (2013). What happens when you trust your supervisor? mediators of individual performance in trust relationships. *Journal of Organisational Behaviour*, 34(3), 407-425.

Li, N., & Yan, J. (2009). The effects of trust climate on individual performance. *Frontiers of Business Research in China*, 3(1), 27-49. <https://doi.org/10.1007/s11782-009-0002-6>

Linton, G. (2019). Innovativeness, risk-taking, and proactiveness in startups: a case study and conceptual development. *Journal of Global Entrepreneurship Research*, 9(1), 1-21.

Liu, D., Bakari, H., Niaz, M., Zhang, Q., & Shah, I. A. (2022). Impact of managerial trustworthy behaviour on employee engagement: mediating role of perceived insider status. *Frontiers in Psychology*, 4040.

Liu, W., Zhang, P., Liao, J., Hao, P., & Mao, J. (2016). Abusive supervision and employee creativity: the mediating role of psychological safety and organisational identification. *Management Decision*, 54(1), 130-147. <https://doi.org/10.1108/MD-09-2013-0443>

Liu, Y., Fuller, B., Hester, K., Bennett, R. J., & Dickerson, M. S. (2017). Linking authentic leadership to subordinate behaviours. *Leadership and Organisation Development Journal*.

Lizote, S. A., Lana, J., & Verdinelli, M. A. (2015). Intrapreneurial behaviour: a study of higher education institutions. *Revista Alcance*, 21(3), 518.

Luimes, D. (2021). The influence of working from home on employee's intrapreneurial behaviour master thesis—a quantitative study of the role of changing work environment on the relationship between leadership and intrapreneurial behaviour.

Luthans, S., and Peterson, I. A. (2016). Drivers of employee engagement: The role of leadership style. *Global Business Review*, 17(4), 965-979.

Luu, T. T. (2021). Empowering leadership in hospitality and tourism management: a systematic literature review. *International Journal of Contemporary Hospitality Management*, 33(12), 4182-4214.

MacKinnon, D. P., & Luecken, L. J. (2008). How and for whom? Mediation and moderation in health psychology. *Health Psychology*, 27(2S), S99.

MacKinnon, D. P., Cheong, J., & Pirlott, A. G. (2012). Statistical mediation analysis.

Mahmoud, M. A., Ahmad, S., & Poespowidjojo, D. A. L. (2018). The role of psychological safety & psychological empowerment on intrapreneurial behaviour towards successful individual performance: A Conceptual Framework. *Sains Humanika*, 10(3). <https://doi.org/10.11113/sh.v10n3.1287>.

Mahmoud, M. A., Ahmad, S., & Poespowidjojo, D. A. L. (2021). Psychological safety and individual performance: the mediating effect of intrapreneurial behaviour. *International Journal of Productivity and Performance Management*, (ahead-of-print).

- Mahmoud, M. A., Ahmad, S., & Poespowidjojo, D. A. L. (2022). Psychological empowerment and individual performance: the mediating effect of intrapreneurial behaviour. *European Journal of Innovation Management*, 25(5), 1388-1408.
- Mahmoud, M. S., Knight, R., Catto-Smith, A., Bell, S., & Kamm, M. (2018). Robust control and filtering for time-delay systems.
- Mansoor, A., Farrukh, M., Wu, Y., & Abdul Wahab, S. (2021). Does inclusive leadership incite innovative work behaviour? *Human Systems Management*, 40(1), 93–102. <https://doi.org/10.3233/HSM-200972>.
- Mao, H., Dubey, N., Podder, P., & Pandey, D. (2020). Knowledge of COVID-19 and its influence on mindfulness, cognitive emotion regulation and psychological flexibility in the Indian community. *Frontiers in Psychology*, 11, 589365.
- March, J. G., & Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management Science*, 33(11), 1404–1418. <https://doi.org/10.1287/mnsc.33.11.1404>
- Marijke, J., Okyireh, M. A., Siddique, A. S., & Owusu-Okyireh, R. O. (2021). Intrapreneurship from the lens of the trio: psychological empowerment, employee commitment and organisation citizenship behaviour. *European Journal of Business and Management Research*, 6(6), 253-260.
- Mather, S. A. (2020). The contribution of psychological resources in the creation of employee psychological safety (Doctoral dissertation, University of Reading).

Maximo, N., Stander, M. W., & Coxen, L. (2019). Authentic leadership and work engagement: the indirect effects of psychological safety and trust in supervisors. *SA Journal of Industrial Psychology, 45*, 1–11. <https://doi.org/10.4102/sajip.v45i0.1612>.

May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety, availability, and the engagement of the human spirit at work. *Journal of Occupational and Organisational Psychology, 77*(1), 11-37.

Mckenna, J., & Jeske, D. (2021). Ethical leadership and decision authority effects on nurses' engagement, exhaustion, and turnover intention. *Journal of Advanced Nursing, 77*(1), 198-206.

Milind, G., Radha, I., Neel, K., & Pratik, B. (2019). Ethical leadership and its relationship with sales force performance mediated by trust of sales employees on their leaders. *Annals of the University Dunarea de Jos of Galati: Fascicle: I, Economics & Applied Informatics, 25*(1).

Miller, K., & Brewer, M. B. (2013). Social identity complexity: comparing majority and minority ethnic group members in a multicultural society. *Group Processes and Intergroup Relations, 16*(5), 529-544.

Ministry of Trade and Industry Report (2020). *Annual Budget Estimates of the Ministry of Trade and Industry*.

Monfared, H. J., Ghasemi, A., Loni, A., & Marzband, M. (2019). A hybrid price-based demand response program for the residential micro-grid. *Energy, 185*, 274-285.

Monfared, O.P, Wingreen, S., & Sharma, R. (2019). A blockchain traceability information system for trust improvement in agricultural supply chain.

- Monoor, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(7), 2397-2407.
- Muhammad, F., Chong, W. Y., & Shaheen, M. (2016). Intrapreneurial behaviour: an empirical investigation of personality traits. *Management and Marketing Challenges for the Knowledge Society*, 11(4), 597-609.
- Nartey, D. (2021). The impacts of emerging human resource practices on employee satisfaction, life satisfaction and the role courage in these impacts: an exploratory study in the education sector in Ghana.
- Nazir, S., Qun, W., Hui, L., & Shafi, A. (2018). Influence of social exchange relationships on affective commitment and innovative behaviour: role of perceived organisational support. *Sustainability*, 10(12), 4418.
- Neessen, P., Caniels, M. C. J., Vos, B., & De Jong, J. (2018). The intrapreneurial employee: towards an integrated model of intrapreneurship and research agenda. *Academy of Management Proceedings*, 2017(1), 10355. <https://doi.org/10.5465/ambpp.2017.10355>.
- Newman, A., Herman, H. M., Schwarz, G., & Nielsen, I. (2018). the effects of employees' creative self-efficacy on innovative behaviour: the role of entrepreneurial leadership. *Journal of Business Research*, 89, 1-9.
- Newman, B. M., & Newman, P. R. (2017). *Development through life: a psychosocial approach*. Cengage learning.

Newman, S. A., & Ford, R. C. (2021). Five steps to leading your team in the virtual COVID-19 workplace. *Organisational Dynamics*, 50(1), 1008-1020.

Ngure, J. W. (2016). Functional level strategies and the effectiveness of saape Ltd (Doctoral dissertation, University Of Nairobi).

Nitzl, C., Roldan, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: helping researchers discuss more sophisticated models. *Industrial Management and Data Systems*.

Norden, J. (2020). A superintendent's trust-building practices with principals: a case study.

Novitasari, D., Supriatna, H., Asbari, M., Nugroho, Y. A., & Nadeak, M. (2021). Exploring the impact of trust in leader and knowledge sharing on employee innovation. *International Journal of Social and Management Studies*, 2(3), 47-62.

Obuobisa-Darko, T. (2019). Leaders' behaviour as a determinant of employee performance in Ghana: the mediating role of employee engagement. *Public Organisation Review*, 20(3), 597-611. <https://doi.org/10.1007/s11115-019-00460-6>.

Okeke, A., & Chipson, K., (2019). Psychological availability, psychological safety and optimism as predictors of innovative behaviour among workers. *International Journal of Psychological Research and Reviews*, 2, 16-16.

Okyireh, M. A., Siddique, A. S., & Okyireh, R. O. (2021). Intrapreneurship from the lens of the trio: psychological empowerment, employee commitment and organisation citizenship behaviour. *European Journal of Business and Management Research*, 6(6), 253-260.

Okyireh, M. A., Siddique, A. S., & Okyireh, R. O. (2021). Intrapreneurship from the lens of the trio: psychological empowerment, employee commitment and organisation citizenship behaviour. *European Journal of Business and Management Research*, 6(6), 253-260.

Oribhabor, C. B., & Anyanwu, C. A. (2019). Research sampling and sample size determination: a practical application. *Journal of Educational Research (Fudjer)*, 2(1), 47-57.

Osei, H. V., Osei-Kwame, D., & Osei Amaniampong, L. (2017). The effects of individual mechanisms on work self-efficacy of nurses: the mediating role of organisational commitment. *International Journal of Healthcare Management*, 10(4), 219-237.

Owusu-Asiamah, M. (2018). Relation between head nurses' perception of entrepreneurial leadership and decisionmaking effectiveness. *Tanta Scientific Nursing Journal*, 27(4), 65-83.

Oyewo, B., & Ajibolade, S. (2019). Does the use of strategic management accounting techniques creates and sustains competitive advantage? some empirical evidence. *Annals of Spiru Haret university. Economic Series*, 19(2), 61-91.

Ozsunur, F. (2019, May). A research on women's entrepreneurship motivation: sample of adana province in women's studies. *International Forum* (Vol. 74, pp. 114-126). Pergamon.

- Pan, Q., & Wei, H. (2009). Effects of trust in leader on individual performance: empirical study from knowledge work teams. *International Conference on Management and Service Science*. <https://doi.org/10.1109/icmss.2009.5303832>.
- Pandey, J., Gupta, M., & Hassan, Y. (2020). Intrapreneurship to engage employees: role of psychological capital. *Management Decision*, 59(6), 1525-1545.
- Park, W. W., & Kim, S. (2012). The need of leader-subordinate reciprocal dyadic trust to build the subordinate's trust in the organisation: the case of Korean air pilots. *The International Journal of Aviation Psychology* 22(2),97-119. <https://doi.org/10.1080/10508414.2012.663234> .
- Pellegrini, E. K., & Scandura, T. A. (2008). Paternalistic leadership: a review and agenda for future research. *Journal of Management*, 34(3), 566-593.
- Peng, Y. P. (2020). Relationship between job involvement, leader-member exchange, and innovative behaviour of public librarians. *Journal of Librarianship and Information Science*, 52(2), 441-450. <https://doi.org/10.1177/0961000618810378>.
- Pinchot III, G. (1985). Intrapreneuring: why you do not have to leave the corporation to become an entrepreneur. University of Illinois at urbana-champaign's academy for entrepreneurial leadership historical research reference in entrepreneurship.

- Potter, R., O'Keeffe, V., Leka, S., Webber, M., & Dollard, M. (2019). Analytical review of the Australian policy context for work-related psychological health and psychosocial risks. *Safety Science, 111*, 37-48.
- Qasim, S., Usman, M., Ghani, U., & Khan, K. (2022). Inclusive leadership and employees' helping behaviours: role of psychological factors. *Frontiers in Psychology, 13*.
- Qian, J., Zhang, W., Qu, Y., Wang, B., & Chen, M. (2020). The enactment of knowledge sharing: the roles of psychological availability and team psychological safety climate. *Frontiers in Psychology, 11*, 551366.
- Rabiul, M. K., Mohamed, A. E., Patwary, A. K., Yean, T. F., & Osman, S. Z. (2021). Linking human resources practices to employee engagement in the hospitality industry: the mediating influences of psychological safety, availability and meaningfulness. *European Journal of Management and Business Economics*. <https://doi.org/10.1108/EJMB-E-12-2020-0347>.
- Ramati-Navon, L., Carmeli, A., & Menahem, G. (2022). Inclusiveness and intrapreneurial behaviours in organisations. *The Journal of Entrepreneurship, 31*(2), 235-273.
- Ravand, H., & Baghaei, P. (2016). Partial least squares structural equation modeling with r. *practical assessment, research, and evaluation, 21*(1), 11.
- Reed, D. S. (2022). Employees who rate their supervisor as ethical, and feel more control, are more likely to suggest improvements. <https://doi.org/10.31235/osf.io/985cm>.

- Rezaei, M. (2016). The role of childhood trauma, early maladaptive schemas, emotional schemas and experimental avoidance on depression: a structural equation modeling. *Psychiatry Research*, 246, 407-414.
- Rich, Y., Sulisty, A. R., & Suhartini, S. (2019). The role of work engagement in moderating the impact of job characteristics, perceived organisational support, and self-efficacy on job satisfaction.
- Rigtering, J. C., & Weitzel, U. (2013). Work context and employee behaviour as antecedents for intrapreneurship. *International Entrepreneurship and Management Journal*, 9(3), 337-360.
- Rigtering, J. C., & Weitzel, U. (2022). Work context and employee behaviour as antecedents for intrapreneurship. *International Entrepreneurship and Management Journal*, 9, 337-360.
- Rojuaniah, E., Sule, T., & Joeliaty, S. (2016). The factors influence intrapreneurship behaviour in construction company. *International Journal of Scientific & Technology Research*, 5(5), 36-40.
- Russo, M., Shteigman, A., & Carmeli, A. (2016). Workplace and family support and work-life balance: implications for individual psychological availability and energy at work. *The Journal of Positive Psychology*, 11(2), 173-188.
- Saboor, M. J., Yasmin, R., Paracha, A. T., & Amin, S. (2020). Linking intrapreneurial skills with intrapreneur's performance: mediating role of rewards. *International Journal of Management*, 11(08).
- Sahni, J. (2021). Employee engagement among millennial workforce: empirical study on selected antecedents and consequences. *SAGE Open*, 11(1), 21582440211002208.

Sarantakos, S. (1998). Sampling procedures. In *Social research*. Palgrave, London.

Saunders, B., Kitinger, J., & Kitinger, C. (2015). Anonymising interview data: challenges and compromise in practice. *Qualitative Research*, 15(5), 616-632.

Saunders, M. N., & Townsend, K. (2016). Reporting and justifying the number of interview participants in organisation and workplace research. *British Journal of Management*, 27(4), 836-852.

Saunders, M. N., Lewis, P., Thornhill, A., & Bristow, A. (2015). Understanding research philosophy and approaches to theory development.

Saunders, M., Lewis, P., & Thornhill, N. (2007). Research methods. *Business students 4th edition Pearson education limited, England*.

Schaubroeck, J., Lam, S. S., & Peng, A. C. (2011). Cognition-based and affect-based trust as mediators of leader behaviour influences on team performance. *Journal of Applied Psychology*, 96(4), 863.

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (1996). Organisational trust: philosophical perspectives and conceptual definitions. *Academy of Management Review*, 337-340.

Schumpeter, J. A., (1934). Robinson's economics of imperfect competition. *Journal of Political Economy*, 42(2), 249-259.

Scott, S. G., & Bruce, R. A. (1998). Following the Leader: The joint effect of subordinate problem-solving style and leader-member relations on innovative behaviour. *IEEE Transactions on Engineering Management*, 45(1), 3-10.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley and sons.

Shakra, A. A. (2021). Intrapreneurial behaviour: the role of human resource training practice, new ways of working and workload (Issue 3). Tilburg University.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: a review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1), 33-53.

Sharkie, R. (2009). Trust in leadership is vital for employee performance. *Management Research News*, 32(5), 491–498. <https://doi.org/10.1108/01409170910952985>.

Shirom, A. (2011). Vigor as a positive affect at work: conceptualizing vigor, its relations with related constructs, and its antecedents and consequences. *Review of General Psychology*, 15(1), 50-64.

Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Goossens, L., Beyers, W., & Ryan, R. M. (2016). Conceptualizing parental autonomy support: adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*, 43(3), 633.

Song, L., Wang, C., Zhang, L., Du, B., Zhang, Q., Huang, C., & Wang, X. (2020). Unsupervised domain adaptive re-identification: *Theory and Practice. Pattern Recognition*, 102, 107173.

Stull, M., & Singh, J. (2005). Intrapreneurship in nonprofit organisations: examining the factors that facilitate entrepreneurial behaviour among employees. *Retrieved May, 24(2019)*, 192-210.

- Stull, M., & Aram, J. D. (2010). Exploring trust as an influencing mechanism of intrapreneurship. *International Journal of Management and Marketing Research*, 3(3), 17-38.
- Taheri, R. H., Miah, M. S., & Kamaruzzaman, M. (2020). Impact of working environment on job satisfaction. *European Journal of Business and Management Research*, 5(6).
- Tchouchu, E. (2017). The effect of human resource management practices on job satisfaction among senior staff of the University of Cape Coast (Doctoral Dissertation, University of Cape Coast).
- Vansteenkiste, M., Lens, W., Donche, V., & Aelterman, N. (2016). Motivatie in de klas. *Handboek diagnostiek*, 180, 175-194.
- Vansteenkiste, M., Lens, W., Soenens, B., & Luyckx, K. R. M. (2007). Conceptualizing parental autonomy support: adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*, 43(3), 633.
- Vignoli, M., Depolo, M., Cifuentes, M., & Punnett, L. (2018). Disagreements on leadership styles between supervisors and employees are related to employees' well-being and work team outcomes. *International Journal of Workplace Health Management*.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119-134.

- Wang, C., Wei, Y., Zhao, X., Zhang, X., & Peng, Y. (2021). Abusive supervision and creativity: investigating the moderating role of performance improvement attribution and the mediating role of psychological availability. *Frontiers in Psychology, 12*, 658743.
- Wang, Y., Chin, T., Caputo, F., & Liu, H. (2022). How supportive leadership promotes employee innovation under uncertainty: *Evidence from Chinese E-commerce Industry. Sustainability, 14*(12), 7491.
- Wanless, S. B. (2016). The role of psychological safety in human development. *Research in Human Development, 13*(1), 6-14.
- Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural equation modeling: A Multidisciplinary Journal, 15*(1), 23-51.
- Williams, L. (2017). A quantitative study on organisational commitment and communication satisfaction of professional staff at a master's institution in the united states. *Journal of Higher Education Policy and Management, 39*(5), 487-502.
- Williams, T. A., & Shepherd, D. A. (2017). Mixed method social network analysis: combining inductive concept development, content analysis, and secondary data for quantitative analysis. *Organisational Research Methods, 20*(2), 268-298.
- Wohlgemuth, V., Wenzel, M., Berger, E. S., & Eisend, M. (2019). Dynamic capabilities and employee participation: the role of trust and informal control. *European Management Journal, 37*(6), 760-771.

- Wong, C. S., & Law, K. S., (2017). An empirical test of the model on managing the localisation of human resources in the people's republic of China. *The International Journal of Human Resource Management*, 15(4-5), 635-648.
- Wood, J., Oh, J., Park, J., & Kim, W. (2020). The relationship between work engagement and work–life balance in organisations: a review of the empirical research. *Human Resource Development Review*, 19(3), 240-262.
- Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The construct of the learning organisation: dimensions, measurement, and validation. *Human Resource Development Quarterly*, 15(1), 31-55.
- Yuan, F., & Woodman, R. W. (2021). Innovative behaviour in the workplace: the role of performance and image outcome expectations. *Academy of Management Journal*, 53(2), 323-342.
- Yuan, Y., Kong, H., Baum, T., Liu, Y., Liu, C., Bu, N., Wang, K., & Yin, Z. (2021). Transformational leadership and trust in leadership impact employee commitment. *Tourism Review*. <https://doi.org/10.1108/TR-10-2020-0477>.
- Zahra, S. A., Nash, S., & Bickford, D. J. (1995). Transforming technological pioneering into competitive advantage. *Academy of Management Perspectives*, 9(1), 17-31.
- Zeng, H., Zhao, L., & Zhao, Y. (2020). Inclusive leadership and taking-charge behaviour: roles of psychological safety and thriving at work. *Frontiers in Psychology*, 11, 62.

APPENDICES

APPENDIX A: QUESTIONNAIRE

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT

QUESTIONNAIRE FOR EMPLOYEES

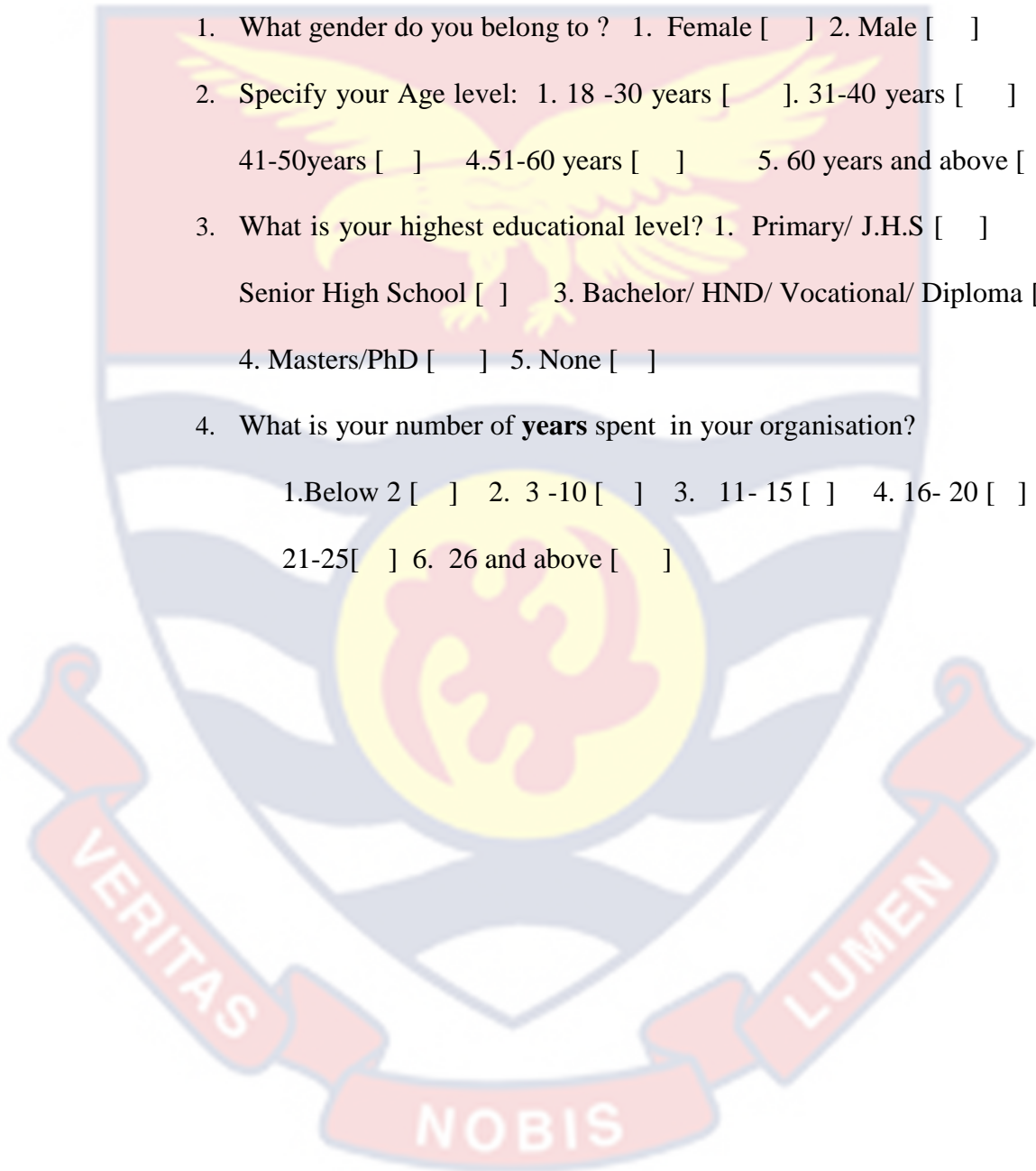
Dear Sir/Madam,

This questionnaire is part of the requirement for a master's degree in Business Management at Department of Management, University of Cape Coast, Ghana. The questionnaire is to solicit information on the **“Leader Trustworthiness and Employees’ Intrapreneurial Behaviour: the role of Psychological Safety and Psychological Availability.”** You are cordially invited to express your perspectives on the subject being investigated. The collected responses will be used exclusively for academic purposes. Rest assured that your confidentiality will be strictly maintained. Hence, no information you provide will be linked to you or your organisation, as only summarised data will be presented in this study. You are kindly required to answer the questions as frankly as possible since you will be contributing to knowledge. I appreciate your time and willingness to participate in this study.

PART 1**DEMOGRAPHIC INFORMATION OF RESPONDENTS**

Please indicate your response by ticking the appropriate area for each question.

1. What gender do you belong to ? 1. Female [] 2. Male []
2. Specify your Age level: 1. 18 -30 years [] 31-40 years [] 3. 41-50years [] 4. 51-60 years [] 5. 60 years and above []
3. What is your highest educational level? 1. Primary/ J.H.S [] 2. Senior High School [] 3. Bachelor/ HND/ Vocational/ Diploma [] 4. Masters/PhD [] 5. None []
4. What is your number of **years** spent in your organisation?
1. Below 2 [] 2. 3 -10 [] 3. 11- 15 [] 4. 16- 20 [] 5. 21-25 [] 6. 26 and above []



PART 2

LEADER TRUSTWORTHINESS (LT)

Consider your workplace and the team responsible for management (including leaders, supervisors, managers, and the general manager), and consider how leader trustworthiness influence your intrapreneurial behaviour. Please indicate your level of agreement with the following statements by marking (√) the corresponding number. Use a scale of 1-7 with where **1=least form of Agreement to 7=Highest form of Agreement.**

LEADER TRUSTWORTHINESS (LT)		Likert scale						
		1	2	3	4	5	6	7
1	Management highly values my needs and desires.							
2	My supervisor actively promotes my skill development.							
3	My leader consistently strives to treat others fairly.							
4	I agree with my leader's values.							
5	My leader actively assists me in resolving work-related issues.							
6	My leader demonstrates great concern for my well-being.							
7	My leader places significant importance on my needs and desires.							
8	My leader encourages employees to participate in important decisions.							
9	My leader acknowledges and commends good performance							
10	My leader possesses extensive knowledge about the necessary work.							

PART 3

PSYCHOLOGICAL SAFETY (PS)

To what extent do you feel safe minded or comfortable regarding your workplace, assess whether there exists a hostile or threatening environment. Kindly indicate the extent to which you agree with the following statements by marking (✓) the applicable number. Use a scale of 1-7 with where: **1=Least form of agreement to 7= Highest form of agreement**

PSYCHOLOGICAL SAFETY (PS)		Likert scale						
		1	2	3	4	5	6	7
1	I feel comfortable being my authentic self in the workplace.							
2	The work environment is free from intimidation.							
3	I feel confident in expressing my viewpoints at work.							
4	Mistakes made in this organisation are not frequently held against me.							
5	Seeking assistance from colleagues within this department is an easy task.							
6	My manager frequently motivates me to undertake new responsibilities and acquire unfamiliar skills.							
7	In case I encounter any issues within the company, I can have confidence in my manager's support and advocacy for me.							
8	Whenever I bring up a problem with my manager, he/she demonstrates a genuine interest in assisting me in finding a resolution.							
9	This organisation appreciates and actively utilizes my distinct skills and talents.							
10	This organisation recognises and makes good use of my distinct abilities and talents.							

PART FOUR (4)**PSYCHOLOGICAL AVAILABILITY (PA)**

To what extent do you feel confident pertaining to your capacity to be mentally, physically, and emotionally present in the workplace?. Kindly specify your level of agreement with the provided statements by marking (√) the corresponding number. Use a scale of 1-7 with where **1=Least form of agreement** to **7= Highest form of agreement**

PSYCHOLOGICAL AVAILABILITY		Likert scale						
		1	2	3	4	5	6	7
1	I possess emotional readiness to handle the challenges of my job demands.							
2	I possess a strong belief in my ability to think effectively in the professional environment.							
3	I have assurance in my capacity to display appropriate emotions during work-related activities.							
4	I am comfortable in my capacity to handle work-related challenges as they arise.							
5	I experience a sense of emotional well-being by the end of the workday.							
6	I am physically prepared to engage in my work.							
7	I feel enthusiastic when I achieve success in my job performance.							
8	I wholeheartedly dedicate myself to my job.							
9	I invest substantial effort in carrying out my job responsibilities.							
10	I do not need to use mental energy to worry about my personal life outside of work.							

PART 5

INTRAPRENEURIAL BEHAVIOUR (IB)

Kindly express your degree of agreement with the following statements by marking (√) the corresponding number. Use a scale of 1-7 with where **1=Least form of agreement** to **7= Highest form of agreement**.

INTRAPRENEURIAL BEHAVIOUR		Likert scale						
		1	2	3	4	5	6	7
During the progression of my work,								
1	I am willing to make strategic decisions that involve assessing potential risks.							
2	I approach new projects or activities with caution and care.							
3	I participate in endeavors that carry the possibility of not being successful.							
4	I produce valuable innovative ideas.							
5	I create and innovate new processes, services, or products.							
6	I find new ways to do things.							
7	I frequently approach tasks with a distinct perspective or unconventional methods.							
8	I take proactive measures to address future issues, anticipate needs, or adapt to changes.							
9	I am excellent at identifying opportunities.							
10	I have a tendency to proactively introduce changes ahead of their necessity.							

Thank You!