

# Understanding the internal and external drivers of imposter syndrome in black females in the ICT sector in South Africa.

By

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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#### Abstract

**Purpose:** The purpose of this study is to investigate the internal and external influencers of feelings of imposter syndrome in black female leaders in the ICT sector of South Africa. The study further aims to determine the mediating impact of self-efficacy on feelings of imposterism. The imposter phenomenon, professional identity, STEM identity and self-efficacy frameworks were applied as a theoretical lens to the study.

**Design, Methodology, and Approach:** The analysis is premised on the data collected from semi-structured interviews conducted with 18 black women engaged in the ICT sector of South Africa. This cross-sectional, qualitative research methodology examined the internal and external factors that induce feelings of imposterism in black female leaders in the ICT sector of South Africa.

**Findings:** The results indicate that black female leaders in the ICT sector of South Africa experience feelings of imposterism. The feelings of imposterism were influenced by the fear of success, deflection of praise, the underrepresentation of black women in positions of leadership and discrediting comments by colleagues. Additionally, the mediating role of self-efficacy on feelings of inadequacy is limited.

Keywords: Black female leaders, Imposter syndrome, ICT sector



#### Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

The name of the student and the date should follow the declaration

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01 November 2022

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#### 1. Chapter 1: Introduction to Research Problem

#### 1.2. Purpose

The global community is progressively transitioning to a digital economy with a renewed focus on the Information and Communications Technology (ICT) sector (Powell & Chang, 2016). The focus on ICT has brought about discussions on the demographics of the sector with studies on worldwide trends indicating that in both developed and developing economies, males are dominating the sector with women not only accounting for a small percentage of the sector but an even smaller percentage (15%) of leadership positions (Melhem et al., 2009; Tandon et al., 2012; Alfred et al., 2019). This is a global trend that is characterised by females being employed in entry level positions in ICT while male counterparts occupy top tier, higher skill, higher wage and influential positions (Powell & Chang, 2016).

South Africa is not immune to this phenomenon that has been further exacerbated by the historical racial and gender discrimination that plagued the country. The retention and advancement of black female talent in the ICT sector has remained a struggle as evidenced by the gender gap in the sector (Republic of South Africa Ministry Communications and Digital Technologies, 2020; Matotoka & Odeku, 2021; Cullen et al., 2022).

Gender and racial diversity in business is a focus area for the South African government in order to redress the legacy of apartheid which excluded black people from decision making positions in corporations (Deloitte, 2020). It has also become crucial for corporations to achieve gender and racial diversity as it is beneficial to business by enabling corporate sustainability, competitiveness and relevance (Gordon Institute of Business, 2017).

Individuals in positions of leadership are susceptible to experiencing feelings of imposter syndrome (Aparna & Menon, 2020). Imposter syndrome is simply defined as "...doubting your abilities and feeling like a fraud..." and is said to be mostly



prevalent in high achievers who experience difficulties embracing their success (Tulshyan & Burey, 2021, p.2). Chrousos & Mentis (2020) explain it as not only selfdoubt but the inherent fear of being found to be an ineligible professional despite their professional track record and career accolades. Additionally, imposter syndrome has a pervasive impact on the sufferers both personally and professionally leading to maladjusted conduct and attitudes such as emotional distress (Aparna & Menon, 2020; Kuna, 2019).

Imposter syndrome was found to lower career ambition, development and the motive to pursue leadership positions (Neureiter & Traut-Mattausch, 2017). LaDonna et al. (2018) established that feelings of imposter syndrome were exacerbated during periods of career advancement, where individuals experienced change, increased responsibilities and tribulations. In addition, experiencing feelings of being an imposter are emotionally taxing and may act as a motivator to avoid accepting and pursuing opportunities that will advance their careers ultimately placing them in positions of leadership (LaDonna et al., 2018). Therefore, imposter syndrome is a potential inhibitor of diversity in the ICT Sector and women actively pursuing career development due to the expected emotional distress associated with career progression.

The study aims to understand the internal and external drivers of imposter syndrome in black female leaders in the ICT sector in South Africa. The outcomes of this study may uncover an additional contributing factor to the lack of black female representation in the management of ICT companies. In addition, black females will understand the internal factors that contribute to feelings of imposter syndrome and how they can be overcome by developing self-efficacy. Furthermore, ICT corporations will gain insight regarding workplace practices and cultures and the role they play in the attraction and retention strategies employed for black female talent.

#### 1.3. Context of the study

#### 1.3.1. The Importance of the ICT Sector in South Africa

The ICT sector is important in the South African context as it significantly contributes to the competitiveness of the country and economic growth, providing R93 billion to



the South African economy (International Trade Centre, 2020; Lewis, 2021; StatSA, 2017). The stimulation of economic growth has resulted in the sector creating employment opportunities across a wide range of industries (Lewis, 2021). Additionally, the global economy is being restructured by fast paced digital transformation (The World Bank, 2018). Digital transformation is pervading all industries and every component of daily life, impacting the ways in which individuals learn, work, conduct business, have social interactions, access services as well as information (The World Bank, 2018). Therefore, the adoption and implementation of a digital economy is anticipated to typify future economies, contributing to the competitiveness of the country in a global market as well as improving the quality of life of South African citizens (The World Bank, 2018). Not only is the ICT sector relevant to the South African economy of today but it is also the cornerstone of the digital economy of tomorrow.

#### 1.3.2. The global context of women in leadership

Devillard et al. (2018) argues that the global transformation of corporate leadership teams to be more representative of females is lagging. This is evidenced by the fact that only 32% of women are represented in positions of leadership at a global level. The majority of which occupy positions in human resources rather than leadership roles that are operational and strategic (Grant Thornton, 2022). Strategic roles such as that of a chief information officer (CIO), are held by only 19% of females, chief executive officer (CEO) roles are held by 24% of women and chief operating officer (COO) positions by 23% females (Grant Thornton, 2022). Additionally, women comprise just 4.6% of the total CEO's of Global 500 companies (Connley, 2021). Contrasted to the female world population of 49.6%, the portion of women engaged in leadership positions is scant as one would expect the proportion of leadership roles occupied by women to be in line with the global population (The World Bank, n.d.). Furthermore, women of colour are the least represented in positions of leadership from manager level all the way up to c-suite level (Thomas et al., 2021). Although there have been strides made to encourage the equitable representation of women in positions of management globally, the representation remains insufficient.

### **1.3.3. The South Africa context**

The global underrepresentation of women in positions of leadership is similar to that of South Africa. A PwC report (2022) indicated that the top 40 JSE listed companies did not have any women in chief executive officer (CEO) positions. Furthermore, of the total JSE listed companies only 3.31% comprised of female CEOs. In addition, the demographics of leadership teams of JSE listed companies are comprised as follows; 96.6% of all CEOs are male, 87.2% are male CFOs and lastly 91% of executive directors are men (PwC, 2022). These statistics indicate the gross underrepresentation of women in decision making positions in South Africa.

In addition, the 2021 Information Communication Technology (ICT) sector black economic empowerment measures indicate that black females occupy only 15.9%, 41% and 13.8% of the executive committee management positions in the telecommunications, broadcasting and postal industries respectively (Independent Communications Authority of South Africa, 2021). In a country with a female population of 30.09 million that exceeds that of men (29.22 million) (Statista, 2022), the leadership positions occupied by women in this sector, are not representative of the population. Furthermore, the insufficient representation of women in the technology sector is acknowledged by the South African government (Government of South Africa, 2019).

### 1.3.3.1. The History of South Africa

In order for one to understand the nuanced corporate structure of South Africa, one would need to unpack the history of the country in order to gain an appreciation of some of the factors that influenced the lack of representation of black women in positions of leadership in the ICT sector. Black women in the South African context means "...African, coloureds and Indians..." (South African Government, n.d., p.4)

South Africa has a unique history of inequity promulgated by the apartheid system which legislated the segregation of white and non-white South Africans. Apartheid disadvantaged the black population and limited their access to particular industries and leadership positions. The white population, including white women benefited from superior services from the state, better education and economic access to skilled jobs (Gasa, 2007). Additionally, the apartheid regime entrenched a racial and



gender power structure, where white women received privileges by virtue of their race whilst still subdued from a gender perspective in society and the workplace (Booysen & Nkomo, 2010). Black women however, suffered double discrimination due to race and gender (Booysen & Nkomo, 2010). These racial and gender hierarchies were so pervasive that they still impact places of work and society even today.

In addition to the racial discriminatory system, women are subject to sexism perpetuated in society and the workplace (Karami et al., 2020). The society of South Africa is patriarchal in nature influenced by the pre-industrialisation history of the country where men had societal and economic power and women were perceived to be subservient to men (Keevy, 2008; Mudau et al., 2017). Historically, a women's role was limited to domestic care which involved raising the children and seeing to the wellbeing of the family (Stichter & Parpart, 2019). Whilst men had the authority to make significant decisions both at a societal level as well as within their families (Stichter & Parpart, 2019).

Due to apartheid and the impact of patriarchy, the historic South African workplace was therefore characterized by white men in positions of leadership (Jaga et al., 2018). In addition South African black females were not only socialised to believe that leadership positions in the science, technology, engineering and math (STEM) careers were inaccessible to them by the apartheid structures but also by the patriarchal culture prevalent in the nation (Jaga et al., 2018).

Post-apartheid, the government of South Africa, through legislation such as the Employment Equity Act, Women Empowerment, Gender Equality Bill and B-BBEE Act mandated the equal participation and representation of black South African women in the economy as well as leadership positions (Jaga et al., 2018). The legislation focused on empowering black women rather than all women as white women, although disadvantaged due to their gender, were more privileged than black women due to their race.

#### 1.3.4. The benefits of women in leadership roles

The study by Devillard et al. (2018) has found that top leadership teams comprising a majority of women have shown greater value creation and increased profitability compared to those dominated by men. The value creation is evidenced by increases in the return on equity of up to 47%. In addition, women's equitable participation in the global economy is expected to create additional GDP of \$28 trillion by 2025 (Devillard et al., 2018). Furthermore, organisations whose leadership teams were diversified in terms of gender were 27% more inclined to generate greater economic profits than the industry average as compared to those that were not. Organisations who showed lower levels of diversification in both gender and race, were prone to producing profits that were below that of the industry average (Devillard et al., 2018).

In addition, the study by Noamene et al. (2021) indicates that listed entities on the UK FTSE100 benefited from increased women directorship in the form of financial metrics such as return on equity and return on assets. Women leadership teams are able to deliver increased value creation due to their leadership styles that are distinct from that of men and focus on company health. Additionally, female directors have been found to improve board effectiveness through the enhancement of advisory and monitoring functions (Devillard et al., 2018; Noamene et al., 2021).

Increasing the number of women in leadership positions will not only benefit the organisation from a financial perspective but also from a non-financial standpoint. The non-financial advantages derived from female leadership are business efficiency and effectiveness, enhanced innovativeness and creativity, improved gender equality across the organization aided by an inclusive culture resulting in increased recruitment and retention of talent, bolstered consumer demand needs and demand insights and increased organizational reputation (International Labour Organization, 2019). In addition, the equitable representation of women in positions of leadership has far reaching implications than the organisation, it also has an impact at a national micro economic level, as increasing women's participation in the workforce has proven to result in improved economic growth in the form of increased gross domestic product (International Labour Organization, 2019).



# 1.4. Problem Statement

The imposter phenomenon is characterised by individuals who, in spite of their accomplishments are unable to ascribe their performance to their capabilities, rather, they are plagued by emotions of insecurity and anxiety of being revealed as a fraud (Bravata et al., 2020). It is a phenomenon that is influenced by both internal and contextual factors. A large number of studies in this area have focused on the internal drivers of imposter syndrome such as personality traits with the focus including external factors in recent years (Aparna & Menon, 2020; Cohen & McConnell, 2019, Wang et al., 2019; Tulshyan & Burey, 2021; Kuna, 2019). Equal focus needs to be afforded to both the internal and external factors in order to fully understand this phenomenon and determine effective remedies (Kuna, 2019).

This phenomenon is more prevalent in women and racial minority groups (Canning et al., 2020). Nadal et al. (2021) suggested that racial minority groups were inclined to suffer from imposter syndrome due to consistent subjection of deprecating messaging regarding their collective identity which results in an adverse opinion of ones-self, exacerbated by explicit prejudice and macro-aggressions which enhance personalized repression. Whereas, Clance and Imes (1978), purported that women were more likely to experience heightened feelings of imposter syndrome due to the socialization of women, women are prone to ascribing their achievements to external factors such as flukes and their lack of success as inability. This is in comparison to men who tend to credit their accomplishments to their capabilities and their failures as flukes.

The research problem is focused on the research question; what are the internal and external factors influencing imposter syndrome in black female leaders in the ICT sector in South Africa?

# 1.5. Significance of the study

The objective of this study is to contribute to expanding studies on the influencers of imposter syndrome. This study will investigate the extent to which internal and contextual factors heighten feelings of imposter syndrome in a specific context of, black female leaders in the ICT sector as well as the mediating impact of self-efficacy.



Extensive research has been undertaken on the topic of imposter syndrome in a restricted number of professional contexts such as academia and the medical profession, however, limited studies have been conducted in the context of the technology industry (Bravata et al., 2020). Furthermore, the majority of the research studies on the imposter phenomenon were conducted in the USA and Canada (Bravata et al., 2020). There is therefore, limited exploration of this topic in the South African environment. Additionally, a large number of studies performed around this topic were of a quantitative nature, where data was collected using surveys (Bravata et al., 2020). Conducting a qualitative study is expected to enhance the richness of information to be collated for this study.

#### 1.6. Delimitations

The importance of identifying delimitations in research has been highlighted (Theofanidis & Fountouki, 2019). Therefore five delimitations were identified in this study. The scope of the study was limited to South Africa. The research was delimited to participation in the ICT sector as the target population consists of individuals engaged in the ICT sector. The study is further delimited to a population of black females at managerial to c-suite levels of leadership. Additionally the research approach is delimited to qualitative research performed using interviews that are semi-structured in nature.

### 1.7. Assumptions

Research assumptions are the generalisations and presumptions inherent in the study that are expected and considered to be reasonable and acceptable (Theofanidis & Fountouki, 2019). The assumptions applied in this research study are; the selection of the sample of 18 black female leaders being representative of the population of black female leaders in the ICT sector, the partakers in the study comprehend the questions posed to them and will respond truthfully, the individual's participation is of their own accord and they can rescind their consent at any point in the process without any consequence and lastly, that the anonymity of participants will be maintained.



# 1.8. Structure of the Report

Chapter 1 provides an introduction to the study as well as clarifies the necessity for this research. The introduction focused on imposter syndrome and the internal and contextual influencers. The problem statement section indicated previous studies that have been performed in the field of imposter syndrome. This chapter further details the contributions this study will make in terms of literature as well as business. Finally the chapter describes the delimitations of the study as well as the assumptions applied to the study.

Chapter 2 includes the theoretical review of literature from current as well as past studies on imposter syndrome and the related internal and external drivers. This chapter will include the expansion of theories such as imposter syndrome and the self-efficacy theory.

Chapter 3 details the research questions the research will be aiming to address.

Chapter 4 outlines the research methodology that was applied in order to answer the research questions. This chapter details the research design, the research philosophy applied, the target population of the study, the sampling method and size, the data collection process, the research instrument used to collect data from participants of the study, the method used to analyse the information gathered.

Chapter 5 provides the findings of the study based on the data collected from the narrations of the participants during the semi-structured interviews.

Chapter 6 provides a detailed discussion of the findings as reported in chapter 5. The discussion integrates the literature detailed in chapter 2 per existing studies with the findings.

Chapter 7 provides a conclusion of the study, detailed recommendations for future research and limitations to the study.

#### 2. Literature review

#### 2.1. Introduction

This Chapter delineates the analysis of literature based on previous studies conducted in order to present a postulation for this study. In this Chapter, a review of the imposter syndrome, professional identity and STEM identity theories is performed as they are the focal theoretical lens the study applied in order to gain an understanding of the internal and external factors that influence feelings of imposterism in black women engaged in the ICT sector. Secondly, the study explores the moderating impact of self-efficacy on feelings of imposter syndrome. The self-efficacy theory was therefore reviewed in order to further understand it.

### 2.2. Internal drivers of imposter syndrome in the workplace

Individuals that suffer from imposter syndrome endure persistent feelings of selfdistrust, distorted performance ascription and apprehension that others will perceive them to be frauds (Hutchins et al., 2018). The internalized dialogue of an imposter syndrome sufferer is one reflective of ineptitude and embarrassment. It is an inner story where apprehension and imposterism obscure the past experiences of accomplishment in order to favour the narrative that focuses on dereliction (DeCandia Vitoria, 2021).

Clance (1985) proposed that there were six characteristics that were exhibited by imposter syndrome sufferers. Not necessarily all of the traits would be displayed by the imposter syndrome sufferer however, at the least two to three characteristics would be present. The habits are; the imposter cycle, the need to be the best, the need to be superwoman, fear of failure, denial of competence and fear of success.

According to Clance (1985) the imposter cycle trait entails an imposter sufferer, when faced with a task, focusing on their inadequacies, lack of knowledge and previous challenges faced rather than their previous achievements. The individual is often times paralyzed by feelings of angst and question their worthiness before tackling a task. This can either result in hard work or procrastination followed by overcompensation. Once success has been achieved and they are complimented for

their achievements, imposter sufferers are reassured for a short period, before the cycle commences again when a new task is required to be completed. This cycle perpetuates the notion that the imposter sufferer needs to experience the same distress in order to achieve success again.

In order to determine the relevance of Clance (1985) postulations, studies performed in recent years on imposter syndrome were reviewed. In line with the views of Clance (1985), Tiefenthaler (2018), indicated that individuals who experience imposter syndrome often feel the need to work very hard in comparison with others in order to achieve and to feel worthy, resulting in success or fatigue. Gadsby (2022), also shared similar views that, individuals with the imposter phenomenon, are convinced that they need to exert an immense amount of effort in order to succeed. Edwards (2019), elaborated that women who suffer from feelings of imposterism do not feel deserving of compliments that they receive relating to their scholastic and occupational related achievements. Rather than accepting that their achievements are merited, they perceive them to be unwarranted. Additionally, imposter syndrome sufferers ascribe their accomplishments to good luck and excellent timing, rather than their abilities (Mainali, 2020). Individuals that suffer from imposter syndrome therefore, have an inverse achievement attribution, where they tend to accredit their achievements to external elements such as hard work and luck rather, and their shortcomings to internal elements such as their abilities.

Neureiter and Traut-Mattausch (2016) and Levant et al. (2020) confirmed that individuals that experience imposter syndrome exhibit the fear of failure and the fear of success. The fear of failure specifically has been found to result in goal avoidant behaviour, whereby the fear of non-success has the paralysing effect of one avoiding to pursue their goals (Wester et al., 2020). The fear of success relates to an individual's fear of non-acceptance by their co-workers due to their professional advancement (Neureiter & Traut-Mattausch, 2016). Therefore, individuals, believe that if they reject success, they will avoid the fear of repudiation from colleagues that are jealous of their career advancement (Neureiter & Traut-Mattausch (2016), Gadsby (2022) argues that imposter syndrome sufferers aspire to be successful as

evidenced by their high achievement characteristics such as the need to be the superior performer and perfectionism.

In addition, individuals that experience feelings of imposterism persistently yearn to outperform others and to accomplish more in relation to others, failing which, they exhibit the tendency to discredit their achievements (Maji, 2021).

There have been other studies that explore alternative influencers that were not suggested by Clance (1985) which will be considered. The Chakraverty (2019) study which focused on the imposter phenomenon in the context of individuals pursuing a STEM qualification identified that, an individual's perception of their identity was a contributor to their feelings of imposterism. The study uncovered that individuals in pursuance of male dominated qualifications struggled to internalise their achievements rather, they tended to attribute their achievements to their race and gender rather than their capabilities. These individuals perceived their successes to be as a result of their organisation's need to meet a diversity quota. In the context of South Africa where black women are underrepresented in positions of leadership in the ICT sector, and the government has promulgated legislation such as the Empowerment Equity Act (1998) in order to promote the advancement of black females into leadership positions; black women in the sector may be increasingly susceptible to the attribution of accomplishments to identity.

Schubert and Bowker (2019) established that individuals with low self-esteem as well as individuals with inconsistently high self-esteem were susceptible to imposter syndrome. Self-esteem instability relates to those individuals whose self-esteem fluctuates over time (Schubert & Bowker, 2019). The study indicated that sufferers of imposter syndrome typically have low levels of self-esteem (Schubert & Bowker, 2019). Individuals with imposter syndrome, contend with feelings of inferiority, as they struggle to attribute their achievements to their abilities. Therefore, it is probable that they have a low or inconsistent perception of self.

Linked to the superwomen trait, that motivates individuals to aim to complete tasks perfectly identified by the Clance (1985), Cockley et al. (2018) and Grubb III, & Grubb



(2021) identified the personality trait of maladaptive perfectionism as an antecedent to imposter phenomenon. Maladaptive perfectionism relates to individuals with stratospheric standards (Cockley et al., 2018). This type of perfectionism involves a disparity between the excessive standards and the extent to which the standards are met. Individuals with this type of perfectionism are prone to imposter syndrome as they doubt their capabilities, particularly if they relate to attaining excessively high standards (Cockley et al., 2018). Pannhausen et al. (2020) corroborated the elements of maladaptive perfectionism such as the questioning of one's abilities as well as a fear of making errors and failure. Whereas Grubb III & Grubb (2021), ascertained that individuals with maladaptive perfectionism are inclined to allow their fears of making errors impact their belief of others' perception of them as well as their perception of themselves. Additionally, females were identified to exhibit more imposter syndrome traits as well as perfectionist habits (Medlines, 2022). Grubb III & Grubb (2021), argue that the requisite to outperform others, the need to complete without error and the inclination to work excessively exhibited by imposter syndrome sufferers are congruous with their aspiration to achieve perfection.

Individuals who present with imposter syndrome are concerned with the perceptions of others as it relates to their abilities, therefore, their need to perform tasks perfectly is consistent with their requirement to appear competent.

The postulations on the characteristics and behaviours exhibited by sufferers of imposter syndrome are key in identifying the internal drivers of imposter syndrome as well as how it manifests. Understanding the internal triggers of imposter syndrome will assist the sufferers to become more self-aware and begin to challenge the feelings of imposterism when they arise.

### 2.3. External drivers of imposter syndrome in the workplace

The Clance and Imes theory (1985) posits that imposter syndrome is a self-inflicted phenomenon that is perpetuated by the individuals' actions and is enhanced by the sufferers own perceived inadequacies. The theory does not consider the potential external barriers that individuals contend with in workplaces as potential perpetuators of the syndrome. Cohen & McConnell (2019), argued that feelings of imposterism are influenced by environmental factors rather than character traits or upbringing as



suggested by some studies. The theory further ignores the cultural and historical contexts that are critical in understanding how it arises in women (Tulshyan & Burey, 2021). In addition, the theory does not consider the balance of power as well as systems in organisations that deliberately make individuals feel as though they are inadequate and do not belong (Andrews, 2020). Arleo et al. (2021) highlighted that significant research has been conducted on the strategies individuals need to employ in order to manage imposter syndrome, however, limited research has been conducted on the external factors in the workplace that influence feelings of imposter syndrome in individuals. Furthermore, imposter syndrome is largely viewed as a personal issue which impacts a handful of individuals, however, this is a widespread challenge requiring it to be addressed at an organisational level through the leadership's commitments to cultural and policy changes (Mullangi & Jagsi, 2019).

Imposter syndrome is a psychological condition and is therefore an internal barrier to career advancement. However, there are external drivers in the workplace that provide the perfect breeding ground for imposter syndrome to thrive in individuals.

Arleo et al. (2021) suggested that there are external factors in the workplace that trigger imposter syndrome in individuals. Lack of representation in terms of gender and ethnicity was identified as an influencer of imposter syndrome. A male dominated and predominantly white leadership team and workplace make it challenging for a black female to envision themselves as leader as they do not identify with the predominant demographic of the organisation. Such workplaces send implicit messaging that the black woman does not belong.

Furthermore, Mullangi and Jagsi (2019) argues that the imposter phenomenon is a manifestation of the wicked problem of inequality. This was corroborated by the Khilji (2021) study which indicated that females as well as people of colour in racially and gender unequal environments were subject to exclusionary organisational cultures which influenced their sense of belonging and therefore exacerbated feelings of imposter syndrome. These exclusionary organisational cultures enable the perpetuation of discriminatory behaviours such as the exclusion of the individuals from social networks formulated in their organisations as well as the persistent doubting of their competence resulting in them feeling as though they are interlopers in their own entities (Khilji, 2021).



In addition, the lack of recognition of the individual's viewpoints, particularly in group settings where that person has voiced their opinions but their contributions are ignored influences feelings of imposterism. Khilji (2021) affirmed that many minorities in environments with inequality have experienced meeting settings where their viewpoints were disregarded and ignored resulting in increased feelings of fraudulence. The excessive lack of acknowledgement of ones opinions and contributions will therefore erode the individual's confidence, triggering feelings of inadequacy (Arleo et al., 2021).

Tulshyan and Burey (2021) postulates that imposter syndrome is aggravated in environments where institutional male-bias, sexism and racism exist. Institutional bias and racism in organisations originate from the premise that the structures of organisations were not built to accommodate women, especially black women. In fact, women's participation in organisations, particularly in positions of leadership were as a result of legislation and that the tenet of the structures remained bias towards men and their professional standards, leadership and social styles even after the introduction of women into the workplace. In post-apartheid South Africa, black women still encounter both subtle and explicit racism in the workplace (Jaga et al., 2018).

Devilliard et al. (2018), further posits that that women are confronted with unconscious bias in the workplace which impedes success. An instance of such bias is the performance appraisal processes, where it has been established that men are appraised based on their potential to achieve whereas women are appraised based on actual accomplishments. Furthermore, women are inclined to receive less praise for achievements and are prone to condemnation for failures in comparison to their male counterparts. In addition, women are also confronted with maternal bias, which is an expectation that women are less dedicated to careers due to their role as mothers therefore, are afforded fewer opportunities to occupy positions of leadership and are held to higher levels of excellence. Additionally, women are also faced with verbalised bias, where male counterparts make uncomplimentary comments that insinuate that their accomplishments are illegitimate or were achieved due to favourable external factors (Chakraverty, 2019)

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Slank (2019), suggests that workplaces that embrace and promote an organisational culture of genius amplify feelings of imposter syndrome in individuals. A culture of genius is described as one where an organisation's ideology is ascertained to be underpinned by the belief that aptitude and capabilities are innate traits that cannot be acquired or advanced over time using certain interventions such as diligence, training and determination (Canning et al., 2020). In such organisations intellectual aptitude is perceived to be a talent that cannot be developed, therefore, attempts to attain the talent are viewed as externalities that are testament to the lack of such talent. Individuals, in these organisations that identify that their accomplishments were attained through hard work, then attribute their success to the externality, which is the hard work, rather than their own capabilities.

Individuals who present with imposter syndrome have been identified to have perfectionism as a personality trait (Wang et al., 2019). Individuals with maladaptive perfectionism have the propensity to emphasise their incompetence and are prone to feelings of fraudulence (Wang et al., 2019). The view that the individual's perfectionism trait is linked to feelings of imposterism is widespread in literature and so is the view that the perfectionism trait is innate in the individual rather than learned behaviour. These views however, discredits the impact that an organisational culture of perfectionism has in triggering imposter syndrome. Cultures in the medical field, for example promote confidence and perfectionism in the workplace (Arleo et al., 2021). Cope et al. (2017) indicated that, in the medical field, surgical students are trained to be perfectionists, where accuracy is valued and errors, regardless of their magnitude, are not tolerated. A perfectionist culture can, therefore, not only develop perfectionism in the individual but once developed, it can also heighten feelings of imposterism when unrealistic standards are not met.

Nwaichi (2021), indicated that workplaces in science, technology, engineering and math (STEM) industries are characterised by perpetually high levels of competition as well as high performance. Such environments are well placed to arouse feelings of imposterism compared to those that do not value competitiveness and high performance. Canning et al. (2020) shared similar sentiments in their study which confirmed that in climates where competition is discerned to be high, increased feelings of imposter syndrome are experienced. In addition, Tulshyan and Burey (2021) further corroborates the view that feelings of imposter syndrome thrive in

workplaces whereby pursuit of self-interest are encouraged. High performance and competitive environments place a demand on individual's abilities, which puts constant pressure to assess abilities.

Researchers have increased the scope of the influencers of imposter syndrome to include external factors only in recent years. The exploration of the external forces impacting feelings of imposterism is critical as it enhances the understanding of the phenomenon and why it presents in individuals. This is particularly relevant to women of colour in South Africa, a country with a distinct history of both racial and gender exclusion as it pertains to decision making positions, and their interactions in a male dominated industry; the ICT sector.

#### 2.4. Identity theory

The imposter phenomenon can therefore be characterised as an identity related issue as the individuals have a misconstrued identity of self and their capabilities compared to reality. In addition, Chakraverty (2019) expounded on the influence of externalities such as gender and race on individuals' experiences of imposter syndrome. Therefore, indicating how ones perceived identity can induce feelings of imposterism. Both gender and race shape one's, individual as well societal perspective and understanding of self (Morton & Parsons, 2018). In order to further understand the imposter syndrome phenomenon, the social identity theory as well as the STEM identity theory were explored.

### 2.4.1. Professional and social identity theory

Browne et al. (2018) defines professional identity as a consciousness of oneself in the context of an occupation or the shared occupational identity. Fitzgerald (2020) further elaborated that professional identity is characterised by; the capabilities to complete the tasks required by the profession, knowledge based on formal education, affinity to the values and ethics of the occupation and individuals that identify as professionals within a professional group or community. A professional identity is made up of three components in the context of the profession namely, the individual which refers to who they are, the function which relates to what they do and the environment in which they operate (Rasmussen, 2018).



The development of a professional identity is critical as it provides individuals with the perception that they belong, builds confidence and maintains satisfaction in an environment (Rasmussen, 2018). Additionally, in instances where a professional identity is poorly constructed, individuals have presented with feelings of anxiety and ambivalence (Rasmussen, 2018). Imposter syndrome sufferers are often plagued with feelings of alienation and anxiety indicating a misalignment between who they are, what they do and where they do it.

#### 2.4.2. STEM theory

Collins, (2018) suggested a black student STEM identity model in order to understand the nuances in the development of a STEM identity in individuals. A STEM identity is the understanding of oneself in relation to the STEM profession based on the confidence one has in their STEM capabilities (Collins, 2018; Morton & Parsons, 2018). The STEM theory is relevant to the understanding of the phenomenon as imposter syndrome has been found to be linked to the perception of, not fitting in, in a corporation, particularly as it pertains to job suitability Kumar et al. (2021). The model provides insight into factors that influence an individual's self-concept based on the internal environment and its interactions with the external environment and includes four elements that influence STEM identity, namely, the STEM reflective identity, STEM competence or ability, STEM value or interest and lastly, STEM assimilation (Collins, 2018).

The first factor, the reflective identity addresses the element of belonging and influences the individual's affinity to a STEM occupation (Collins, 2018). The feelings of belonging are stimulated by the individual's association with the external environment (Collins, 2018). It is important that individuals see the representation of their gender and race in an environment in order to affirm their sense of belonging and tear down any limiting group beliefs regarding the likelihood of achieving success (Collins, 2018). In the context of black females in the South African ICT sector, the glaring underrepresentation of black females in positions of leadership may have a negative impact on the feelings of inclusion in the industry ultimately resulting in feelings of imposterism.



The second factor relates to competence and identity and addresses whether one can succeed in a STEM profession (Collins, 2018). An individual's self-perception is key as external compliments can never compare to their view of their own capabilities (Collins, 2018). One needs to be confident in their intellect and abilities in the area of STEM (Collins, 2018). Based on Schubert and Bowker (2019), individuals who lack confidence in their capabilities and exhibit low self-esteem are prone to experiencing the imposter syndrome. Imposter syndrome sufferer's battle with feelings of inadequacy, therefore, the assertions by Schubert and Bowker (2019) are plausible.

The third factor speaks to the value and the individual's interest in the field which impacts whether one would want to succeed in the STEM field (Collins, 2018). The perception of value and interest in the STEM field is influenced by individual interest as well as culture. The external environment needs to value the STEM field in the same way that the individual's internal environment does because the lack of representation may impact personal interest in the field (Collins, 2018).

The last element is assimilation, which considers what one would need to do in order to be successful in the STEM field (Collins, 2018). Individuals, in the context of their individual identity which includes elements of black racial identity, assess whether they can be authentic or need to impersonate someone else in order to succeed in this field (Collins, 2018). Additionally, if the acculturation within the STEM field is perceived to be at odds with the individual identity or success, it will result in a deviation from the individual's identity and culture, the individual will begin to question their ability to fit in and their sense of belonging will be compromised (Collins, 2018). Black women who suffer from imposter syndrome are characterised by feelings of being a fraud in an environment, therefore, they lack a sense of belonging, in some instances these feelings are influenced by experiences in the external environment. Additionally, Morton, et al. (2019) indicated that the STEM culture supported a socialised view of the black race as strange. Furthermore, STEM culture is considered synonymous with isolation, tension, competitiveness, racial distance and individualism (Morton, et al., 2019). This indicates a disconnect between the black female identity and the depiction of success in the ICT sector which often looks like it requires one to be a white male in order to achieve success.

The STEM theory therefore highlights the misalignment of the ICT sector identity of black women in South Africa with their individual identities.

Professional identity, however, is shaped by social identity (Fitzgerald, 2020). Individual identities are the personification of the historical, cultural as well as political factors of society. Therefore, a person's individual and social identity are interlinked (Turner & Oakes, 1986).

Based on the literature review it is evident that feelings of imposter syndrome in individuals are influenced by internal antecedents such as personality traits and identity as well as external precursors such as the environmental contexts. In order to understand the predisposition of black women in ICT to imposter syndrome, the study would need to explore both the internal and external drivers of the phenomenon in individuals.

#### 2.5. Self-efficacy as a stimulus to overcome barriers of imposter syndrome

Literature has demonstrated that although imposter syndrome is an internal phenomenon experienced predominately by women, there are drivers that are external to the individual in the workplace that can heighten feelings of imposterism. However, the sufferers of imposter syndrome are not merely helpless victims to these external stimuli they have agency in how they respond to the aggravators. This agency will be explored utilising self-efficacy as an element of social cognitive theory. Hackett and Betz (1981) posit that the characteristic of self-efficacy is instrumental in enabling women to, widen career prospects as well as strive for and attain career development. In addition, the outward barriers of womens' career development, are overcome through their own self-efficacy. Furthermore, Marshman et al. (2018) indicated that women pursuing STEM careers have considerably lower levels of selfefficacy as compared to their male counterparts. The study further suggests that the disbelief in ones competencies is influenced by stereotypical views of society as well as the overall societal culture. Negative perceptions about females in STEM careers may influence women's perception of success which is contrary to that of men. Women in the STEM field may also infer that one is required to work harder than men in order to achieve in the field, and that their successes are insufficient compared to men (Marshman et al., 2018). Additionally, the underrepresentation of women can adversely impact their self-efficacy strengthening the societal beliefs about women's inability in STEM (Marshman et al., 2018)

Self-efficacy is defined as the credence in ones capabilities in completing tasks (Bandura, 2012). Bandura and Walters (1977) further suggests that the beliefs that individuals have in their abilities are derived in four ways: performance accomplishments, vicarious experience, verbal persuasion and psychological states.

Performance accomplishments are achieved through achieving proficiency in particular task. Repeated mastery of a task increases an individual's self-efficacy encouraging them to undertake similar challenging tasks with the understanding that they can be accomplished with perseverance. Failures in completing tasks however, reduce self-efficacy (Bandura & Walters, 1977). Vicarious experience entails developing self-efficacy through observing others, such as, colleagues excel in tasks. Seeing others gain mastery of tasks, creates an empowered attitude in the individual, that they themselves could attempt he task and accomplish it (Bandura & Walters, 1977).

A criticism however, of vicarious learning, is that it is not a strong influencer of selfefficacy as compared to personal mastery of tasks and may not result in sustained behavioural change. Thirdly, verbal persuasion which, involves strengthening selfefficacy by verbal affirmation that the individual is capable of mastering the task at hand (Bandura & Walters, 1977). A colleague verbalising their confidence in the individual's capabilities, would have the effect of increasing the individual's belief in their own abilities. This, is not effective in isolation, an environment that will enable mastery needs to be in place, and otherwise the individual will effectively be set up for failure which will undermine the verbal affirmation (Bandura & Walters, 1977). This influencer however, is also a week, in that, any affirmation can be quickly contradicted by failure experiences. Similar to the vicarious experiences, this influence is not considered as strong as personal achievement and may result in short lived impact in behaviour. Lastly psychological states, is described as the emotions induced when completing a task. If emotions such as anxiety, fear, and stress are heightened, the individual's performance and sense of belief is diminished (Bandura & Walters, 1977).



The self-efficacy theory by Bandura and Walters (1977) is central in combating both the internal and external factors that enhance the feelings of imposter syndrome in black female leaders in the ICT sector of South Africa. By developing the self-efficacy of these women, they will be empowered to address the impact of imposter syndrome in their careers. This is due to the fact that self-efficacy has been found to have a negative correlation to feelings of imposter syndrome (Mehta et al., 2020). Kumar et al. (2021) study supported that individuals that presented with high levels of selfefficacy did not experience feelings of imposterism.

#### 3. Research propositions and question

The aim of the study is to examine the internal and external influencers of imposter syndrome in black female leaders in the ICT sector of South Africa. Following the review on the imposter syndrome and self-efficacy literature, this chapter sets forth research propositions and question that were developed from existing literature, which this study aims to address. Imposter syndrome as well as self-efficacy are fields of study with decades of studies conducted. In particular, the existence of imposter syndrome and its contextualisation as an internal issue as a result of internal antecedents is a well-researched topic, as shown in the literature review in Chapter 2. The influence of external factors on feelings of imposter syndrome is however an emerging theme in recent studies. Therefore, propositions were determined based on the insights obtained from the wealth of previous studies on the existence of imposter syndrome, the internal drivers of imposter syndrome as well as the role of self-efficacy in combating imposter syndrome. A research question was developed to address the element of external drivers of imposter syndrome.

Proposition 1: Black female leaders in the ICT Sector of South Africa suffer from imposter syndrome characterised by feelings of inadequacy and the attribution of their success to external elements such as hard work rather than their abilities.

This proposition aimed to confirm that minority groups such as, black female leaders particularly in a STEM industry, such as the ICT sector are susceptible to feelings of imposter syndrome.

Proposition 2: The internal drivers of imposter syndrome in black female leaders in the ICT sector include perfectionism, the need to be superwomen, a deflection of compliments, fear of success and fear of failure.

This proposition sought to affirm that imposter syndrome is influenced by internal factors.

Proposition 3: Can self-efficacy minimise the impact of imposter syndrome in black female leaders in the ICT sector?

This proposition aimed to validate that self-efficacy can mediate the feelings of imposter syndrome in black females in the ICT sector.

Research question 1: What are the external drivers of imposter syndrome in the workplace in black female leaders in the South African ICT sector?

This research question sought to gain an understanding of the contextual influencers that impact the feelings of imposter syndrome in black female leaders in the ICT sector of South Africa.

# 3.1. Conclusion

The research propositions and questions informed the research methodology of this study and the manner in which the study was undertaken in order to achieve the research purpose. The next chapter details the research design as well as the data collection methods used in order to address the research propositions and question.

### 4. Research Design and Methodology

### 4.1. Introduction

This study aims to understand the internal and external influencers of the imposter phenomenon in black women particularly in the South African ICT sector. The previous chapter introduced research propositions and a research question that this study intends to address. This chapter outlines the research design and strategy applied to the research propositions and question as well as the methodical choice employed in order to gather the data. The methodology section includes an overview of the target population, unit of analysis, the method applied to select the sample and the size selected, the measurement instruments as well as the process followed to gather the data. This chapter further describes how the data gathered was analysed to determine the findings. Additionally, the ethical principles applied were considered in this chapter.

# 4.2. Choice of research design

Qualitative research is essential in the study of social sciences and to the interpretation of behaviours within and by corporations (Jonsen et al., 2018). Hennink et al. (2020) purport that a qualitative study, is one that allows the researcher to study the intricate experiences of individuals. In addition, qualitative research allows for participants to be studied in their innate habitat to identify how conditions effect their behaviours and experiences. Therefore, a qualitative research approach was considered appropriate for this study as it specifically focuses on participant experiences from their perspective and enabled the researcher to gain in-depth insight of participant interpretations of events, behaviours and objects (Hennink et al., 2020).

# 4.2.1. Purpose of research design

A descriptive approach was applied for this study as it acknowledges the various experiences of participants, and represents detailed accounts of participant experiences and perceptions (Doyle et al., 2020). The approach provided insight into the experiences of black female leaders in the ICT sector as narrated by them,

particularly pertaining the potential internal and external stimulants of their feelings of imposterisim.

# 4.2.2. Philosophy

Interpretivism suggests that empirical data is influenced by contextual factors such as individuals' cultural influences, their experiences as well as their understanding of them (Ryan, 2018). An interpretivist philosophy was applied as the study aimed to gain an in-depth understanding of the internal and external factors that influence women's experience of the imposter syndrome based on their experiences and perceptions. Through the analysis of the rich interview data, further understanding was gained regarding the internal and external factors that influenced the feelings of imposterism in black female leaders in the ICT sector.

# 4.2.3. Approach selected

The deductive approach initially evaluates a theory that exists to apply that theory to a new context and possibly amend the original theory (Woiceshyn & Daellenbach, 2018). An inductive approach, however, follows a down-up process, as it entails the development of theory based on empirical data that was previously collated (Saunders & Lewis, 2018). Due to the lack of an all-encompassing theory that addresses the internal and external drivers of imposter syndrome and the mediating impact of self-efficacy, an inductive approach was applied. Through interviews, the experiences of black female leaders in the ICT sector were obtained, which were used to inform a theory on the internal and external influences of feelings of imposterism and how self-efficacy can mediate the impact of imposter syndrome.

### 4.2.4. Methodological choices

Ojebode et al. (2018) and Vivek and Nanthagopan (2021) advocate for the use of multi and mixed methods particularly in social science research because mixed and multi methods boost the precision and depth of the research.

However, the use of mixed and multi methods is more time consuming and with the time constrained research period on this programme, these methods were not feasible (Vivek & Nanthagopan, 2021). In addition, scholars such as LaDonna et al.



(2018) who recently researched the topic of imposter syndrome using only the qualitative method arrived at consistently credible and valid results which were applied by other users. As such a mono method qualitative design was applied to conduct this research.

#### 4.2.5. Strategy

The study utilised a narrative research strategy. Listening to the black female leaders sequentially narrate their respective experiences of imposter syndrome and its influence on their career progression provided depth in the findings (Saunders & Lewis, 2018).

### 4.2.6. Time horizon

Due to the constrained time period that was available to perform the research, it was imperative to conduct cross-sectional research rather than a longitudinal study. A cross-sectional study was conducted at a particular period to understand internal and external factors of imposter syndrome in black, female leaders in the ICT industry, particularly in South Africa and the impact that self-efficacy had in reducing the impact of imposter syndrome (Saunders & Lewis, 2018).

### 4.3. Proposed research methodology

### 4.3.1. Population

Saunders and Lewis (2018, p.138), defines a population as, "the complete set of group members". The target population of this study was therefore identified as black female leaders in the South African ICT sector. Leaders are specifically defined as middle to C-suite level managers. The population selected was assumed to have extensive information on the impact of organisation culture on imposter syndrome in black South African females employed in the ICT industry.

### 4.3.2. Unit of analysis

The unit of analysis is the individual or group from which research information is collated. In addition, the unit of analysis addresses the query of "what" and "who" is being researched (Kumar, 2018). The study analysed the experiences and narratives



of, individual black female leaders employed in the South African ICT industry. As such, this study explored the external and internal drivers of imposter syndrome in black female leaders in the South African ICT sector.

#### 4.3.3. Sampling method and size

Sampling is the procedure of selecting the research participants from the delineated population (Berndt, 2020). The target sample for this research was sourced utilising the non-probability sampling technique, specifically purposive sampling, where the researcher applied their judgement in selecting leaders that satisfy the criteria (Saunders & Lewis, 2018; Sarstedt et al., 2018). In addition, a homogenous, purposive sampling method was applied as a distinct sub-set of participants were selected, namely black female leaders in middle to C-suite management, engaged in the ICT sector in South Africa (Saunders & Lewis, 2018).

Leaders who met the sample criteria were identified and approached. Personal and professional networks were used to secure leaders that satisfy the selection criteria. Furthermore, the snowball sampling was used to increase the sample size, by requesting participants to refer appropriate leaders who were accessible to participate (Saunders & Lewis, 2018).

Mason (2010) suggests that the most commonly applied sample sizes in qualitative studies are 20 and 30 with 15 being the minimum number of participants. As such the researcher undertook to engage 18 leaders or alternatively until no new information was introduced by the participants (Saunders & Lewis, 2018).

#### 4.3.4. Measurement Instrument

According to Saunders and Lewis (2018), measurement instruments are data collection techniques. Qualitative techniques include semi-structured interviews, unstructured interviews and observations. This study included semi-structured interviews conducted in English, which is the common business language in South Africa.

A semi-structured interview guide was formulated as informed by the literature review as well as the topics and issues that form the objective of the study, namely the internal and external drivers of imposter syndrome in females in the ICT sector of South Africa as well as the mediating impact of self-efficacy on feelings of imposter syndrome. Furthermore, the guide enabled the collection of in-depth insights of the leaders' experiences and perceptions (Saunders & Lewis, 2018).

The semi-structured interview guide consisted of guiding questions that steered the participants to the topic being explored. Although the interviews were semi-structured, care was taken to ensure the questions were open ended, so as to encourage the participants' unaltered sharing of experiences and perceptions. The researcher also probed where explanations and additional information were required. In addition, the researcher was mindful not to ask leading questions in order to avoid inhibiting the participant's ability to share their experiences (Saunders & Lewis, 2018).

#### 4.3.5. Data gathering process

The prospective participants of the study were obtained by first approaching the researcher's local network as well as snowballing. Once identified, the potential respondents who met the criteria were telephonically contacted to explain why the study was being undertaken, provide background information on the research being conducted, solicit their participation in the study and to schedule an appointment for the interview. Identifiers were not used so as to maintain the confidentiality of the identity of the interviewees.

Following which, an email detailing the purpose of the study, researcher's contact details, interview details as well as an informed consent form were distributed to the participants. The informed consent form articulated the participants' right to withdraw from the interview at any time. The participants' approval was also requested to record the interview (Saunders & Lewis, 2018). A concurrent and similar process was followed where the researcher directly contacted their social network as well as referrals.

The researcher conducted 18 semi-structured interviews, aided by video web conferencing services on Microsoft Teams. Each interview was conducted for 25-60 minutes.



The choice to use a video web conferencing service was informed by Saunders and Lewis (2018), as it enabled the researcher to engage with participants who were spatially dispersed as well as to observe the participant's body language, which is critical in inspiring follow-up questions. Furthermore, conducting the interviews via video conferencing mitigated the potential risk of the interviews being interrupted or cancelled due to the impact of Covid-19 and related restrictions.

Archibald et al. (2019) established that the use of Zoom in a qualitative data collection process did not impair the quality of the interview or the experiences of both the researcher and participants during the interview. Their study also found that although there were limited instances of technical difficulties experienced these were outweighed by the benefits of using the platform.

Prior to the interview, the researcher familiarised themselves with the professional background of the participants as well as their employers (Saunders & Lewis, 2018). In addition, the researcher conducted a simulation interview in order to test the effectiveness of their interview methods, the comprehensibility of the questions to be posed, their internet connectivity and audio as well as video recorder functionality (Saunders & Lewis, 2018).

#### 4.3.6. Analysis approach

Once the semi-structured interviews had taken place and the data was collated, the data was categorised as text and non-text data. The text data consisted of written notes taken during the interviews and the non-text data included the video and audio recordings (Saunders & Lewis, 2018). The researcher transcribed the audio recordings verbatim (Saunders & Lewis, 2018), saved the data on a Microsoft Word document and loaded in ATLAS.ti for analysis.

Data analysis was performed using a thematic analysis process. Thematic analysis entails identifying recurring interpretations from the data which are critical in explaining the phenomena (Xu & Zammit, 2020). The thematic analysis process enables the researcher to develop codes and themes from the collated data based on a methodical approach (Braun & Clarke, 2019). A thematic analysis was deemed appropriate for this study as it permitted the researcher to rigorously examine the

emerging representations by the participants per the data set, thus providing the researcher with deeper insights

### 4.3.7. Quality controls

The integrity of a qualitative study refers to the quality of the research process as well as the findings of the research (Daniel, 2019). Daniel (2019) suggests a TACT framework to preserve the trustworthiness of a qualitative research. The framework consists of four characteristics, namely, auditability, credibility, transferability and trustworthiness.

### 4.3.7.1. Auditability

To ensure the research meets the verifiability criteria, the researcher documented the entire research process and has retained records as evidence; including notes and meeting minutes (Daniel, 2019). Additionally, the records will be retained for a minimum of 10 years in safe and accessible storage.

### 4.3.7.2. Credibility

Credibility in qualitative research aims to establish the dependability of the findings from research. Credibility was maintained by accurately transcribing the participants' experiences as well as maintaining meticulous records of each participant's responses. The researcher also re-checked the information provided by the participants through rephrasing their responses in order to confirm the accuracy of the data provided. Furthermore, to minimise researcher bias, the researcher consulted their programme supervisor in order to validate preliminary research outcomes (Daniel, 2019). In addition, LeBaron et al. (2018) indicates that video recordings are long-lasting data that researchers can frequently analyse and colleagues can view in order to verify research findings.

### 4.3.7.3. Transferability

Transferability means that the research outcomes obtained in a specific context can be valuable insights in other similar habitats (Daniel, 2019). The researcher clearly outlined the limitations as well as detailed the specific setting under which the study



was undertaken. In addition the study details the criteria applied in determining the population (Daniel, 2019). Transferability will further be achieved as the interview guide and the research process were clearly documented allowing for this study to be replicated in the future.

### 4.3.7.4. Trustworthiness

In order to enhance the reliability of the study, the researcher applied a methodical approach in analysing the data. In addition, the voice and video recordings provide evidence of the interviews (Daniel, 2019). The trustworthiness of this study will be further enhanced for trustworthiness, as the research methodology has been systematically mapped out.

### 4.4. Limitations

This study was limited to the experiences and perceptions of women within the ICT sector in South Africa. The population included black females that are middle to C-suite level of management. A further limitation is that the research sample size was small and the time within which to conduct the study was constrained. In addition, the study relied on participants' memories of their past experiences and perceptions and feelings of imposter syndrome and the impact that their self-efficacy had on those experiences.

### 4.5. Ethical considerations

Researchers are required to afford protection to human subjects participating in all types of research studies through applying relevant ethical guidelines throughout the research process (Arifin, 2018; Pietilä et al., 2020). However, the application of ethical principles is particularly important for studies that are qualitative in nature as these are comprehensive by design (Arifin, 2018).

The researcher adhered to the ethical conduct as prescribed by the Gordon Institute of Business Science (GIBS) throughout the process of conducting the study. In addition, before the data gathering process, the researcher completed an ethical



clearance application and received the necessary approval from the GIBS ethics committee.

### 5. Chapter 5: Results

### 5.1. Introduction

In this chapter, the results of the research are outlined as obtained from the extensive online semi-structured interviews conducted, in order to address the propositions and research question produced in Chapter 3. The results reported were allocated codes and classified into themes using the ATLAS.ti software pertaining to confirming and answering the propositions and research question. The results are presented methodically as collected and recounted by the partakers of the study barring any bias and interpretation.

### 5.2. Sample description

Before the results of the research are outlined, the specification of the research subjects that participated in the study is required. This study involved 18 black female leaders engaged in the ICT sector, as the study was focused on understanding the internal and external drivers of the imposter phenomenon in black female leaders in specifically the ICT sector. All participants were currently engaged in the sector, in varying technical and non-technical roles, classified as middle management to senior management level.

### Table 1 Summary of partakers

Participant	Gender	Race	Role
Participant 1	Female	Coloured	IT service manager
Participant 2	Female	African	Associate professor
			Senior manager: IT internal
Participant 3	Female	African	audit
			Information digital innovation
Participant 4	Female	African	specialist.
Participant 5	Female	African	Managing director
Participant 6	Female	African	Digital transformation specialist
			Global service delivery
Participant 7	Female	African	manager
			Head of information technology
Participant 8	Female	African	operations
Participant 9	Female	African	Customer success manager
Participant 10	Female	African	IT service delivery manager
Participant 11	Female	African	Senior account executive
Participant 12	Female	African	Service desk manager
Participant 13	Female	African	Product manager
Participant 14	Female	African	Business relationship manager
Participant 15	Female	African	Chief executive officer
Participant 16	Female	African	Director
Participant 17	Female	African	Sales director
Participant 18	Female	African	Chief information officer
Source: Author's ow	1		

Source: Author's own

### 5.3. Proposition results

### 5.3.1. Proposition 1

The purpose of this proposition was to confirm that minority groups in a male dominated industry such as, black female leaders in the ICT sector are prone to suffering from the imposter phenomenon. The partakers in the study were asked to describe what they ascribed their success to, specifically, in the context of their careers. This was so as to determine if they perceived their success to be as a result



of their own capabilities or external factors. Additionally the participants were asked to reflect if they experienced feelings of anxiousness or inadequacy when completing work related tasks as those feelings are synonymous with imposterism.

### Table 2: Proposition 1: Themes

Code	Code Groups	
<ul> <li>Being at the right time and the right place</li> </ul>		
<ul> <li>Dedication results in success</li> </ul>		
<ul> <li>Family support results in success</li> </ul>		
<ul> <li>God's grace, placing you in the right places at the right time</li> </ul>		
results in success	External factors are contributors to success	
Great networks lead to success		
<ul> <li>Hard work and dedication result in success</li> </ul>		
<ul> <li>Hard work results in success</li> </ul>		
<ul> <li>Having supporters leads to success</li> </ul>		
<ul> <li>Mentors that support you and open doors for you leads to</li> </ul>		
success		
<ul> <li>Being an optimist results in success</li> </ul>		
<ul> <li>Being authentic results in success</li> </ul>		
<ul> <li>Drive/ambition leads to success</li> </ul>	Character traits are the key to success	
<ul> <li>Eagerness results in success</li> </ul>		
<ul> <li>Passion leads to success</li> </ul>		
<ul> <li>Perseverance results in success</li> </ul>		
<ul> <li>Resilience results in success</li> </ul>		
<ul> <li>Acquiring multiple skills results in success</li> </ul>		
<ul> <li>Aptitude and competency result in success</li> </ul>		
<ul> <li>Being service and delivery centred leads to success</li> </ul>	Capailities are the key to success	
<ul> <li>Education is the key to success</li> </ul>		
<ul> <li>Openness to learn and knowledge acquired results in success</li> </ul>		
<ul> <li>Taking initiative leads to success</li> </ul>		
<ul> <li>Taking on challenges results in success</li> </ul>		
• Anxiety and inadequacy is induced by doing a task for the first		
time or perceived lack of knowledge	Black female leaders feel anxious or inadequate when performing a task	
<ul> <li>Anxiety and inadequacy is induced by lack of representation</li> </ul>		
<ul> <li>anxiety induced by tasks one feels they are not proficient in</li> </ul>		
<ul> <li>Anxiety is induced by doing the task for the first time</li> </ul>		
<ul> <li>Anxiety leads to the need to outperform male counterparts</li> </ul>		
Anxious		
<ul> <li>Consistent urgency of deliverables causes anxiety</li> </ul>		
<ul> <li>Experience anxiety when completing a task</li> </ul>		
Externally induced anxiety		
feeling anxious or inadequate		
<ul> <li>Individuals feel anxious because of perfectionism</li> </ul>		

Source: Author's own

### 5.3.1.1. Theme 1: Black female leaders in the ICT sector attribute their success to external factors

The attribution of success to external influencers was a recurring theme throughout the data set. Most participants narrated how their achievements were as a result of non-capability related factors such as hard work, mentorship, networks, support and being well positioned to take advantage of opportunities. Participants expressed that they were accomplished in their careers due to hard work and dedication. A participant in the study elaborated that, they constantly demonstrated their capabilities, hence they attained success.

...tons of hard work, always, uh, proving myself... (Participant 1)

...I say it's hard work that's put me here... (Participant 12)

Additionally, some participants further detailed that their achievements were partly attributable to divine assistance and happenstance.

Grace of God. I am, I don't wanna say I'm religious, but I believe in God. So I think he has placed me in certain spaces at the right time with the right people (Participant 3).

But as I say, the being at the right place I think has, has probably largely helped a lot (Participant 17)

Participants indicated that they had great networks and mentors that granted them access to opportunities enabling them to succeed.

So, um, past achievements. Um, think it's definitely hard work and surrounding yourself with mentors that mentors and coaches that, that support you and, and introduce you to opportunities (Participant 15)

One participant emphasised that although her hard work and dedication have contributed to her achievements, without the supportive people who not only expressed belief in her capabilities, but also opened doors of opportunity on her behalf, her hard work would have been ineffective.

...attribute them to my hard work and dedication. But I think it's it's a lot of people along the way who have believed in what I'm capable of and who've opened doors for me. Uh, I think without those, it doesn't matter how hard I had work worked. Uhm, I don't think I would be here now at this age... (Participant 2)

A participant also indicated that they had previously not recognised the accomplishments that they achieved throughout their career as achievements.

So in terms of the achievements, sure. I've never really looked at them as achievement again. I, I guess the imposter syndrome... (Participant 10)

### 5.3.1.2. Theme 2: Black female leaders in the ICT sector attribute their achievements to their character traits

In as much as most participants acknowledged the external factors that contributed to their achievements, some were also cognisant of their innate character traits that also influenced the attainment of their accomplishments. Participants narrated that traits such as perseverance, resilience, ambition, authenticity, optimism, eagerness and passion were attributable to their success.

A participant highlighted that their resilience was critical in acquiring accomplishments throughout their career in the male dominated ICT sector, as they had to be persistent through negative experiences such as bias.

So I would say my resilience, um, cos looking at the, the industry, it's very male dominated. Um, and I remember starting out, I had a lot of problems, um, in terms of fitting in. Um, cos I'm a very, I'm very feminine.... So you can imagine, um, being the person that I am, going into a very technical space. Um, so there were a lot of, there would be bias of course (Participant 9)

### 5.3.1.3. Theme 3: Black female leaders in the ICT sector attribute their accomplishments to their capabilities

Most of the participants further recognized that their capabilities enabled them to attain their achievements throughout their career. Abilities such as proficiency in their work tasks, knowledge acquired through education, being multi-skilled, taking initiative in pursuing opportunities and tackling challenges head on, were identified as contributors to their success.

Relating to their proficiency, participants described the confidence they had in their intellect and its contribution to their achievements.

...And I also think I have a working brain between my ears, so I I I think I'm. I'm pretty sharp. So umm competency I believe is is also what has led to to me...(Participant 3)

I trust this thing in between my ears... (Participant 18)

Participants explained that their acquisition of multiple skills in their careers, through the exposure of varying business areas and tasks enabled them to be multidimensional professionals having acquired vast knowledge and skills, ultimately contributing to their achievements.

....I did a lot of different things. I learned about marketing, I learned about IT. I learned about different things that a business actually needs to operate.... (Participant 5)

...do anything and everything. Like if you there, uh, for typing and they want to make coffee, make coffee, mop the floor, you know. So I've always had that. Like, it's ingrained... (Participant 1)

Additionally, participants described not only knowledge acquired through experience but also formal education as a capability that contributed to their attainment of accomplishments.

...so definitely education, um, so whatever your degree and other courses that you do (Participant 13)

... I was lucky enough as well with the organizations that I have worked for, for them to have also furthered my studies (Participant 11)

### 5.3.1.4. Theme 4: Black female leaders in the ICT sector feel anxious or inadequate when completing work related tasks

Most participants articulated that they were prone to feelings of anxiety as well as inadequacy when completing tasks in the workplace. However, the sources of anxiety and inadequacy vary across the participants. Some participants described that their feelings of anxiety were induced by their lack of proficiency and knowledge in completing the task, usually as a result of attempting a task for the first time, being in an unfamiliar environment or being in a new job role.

...Um, do I feel anxious? Um, sometimes I feel anxious. Um, because I feel like I, I don't know the space well, so anxious and inadequate in some cases, and that happens a lot if you're in a new role. I mean, my current role, I look after things I've never, never looked after before. So do I sometimes feel inadequate? Definitely. I look after a budget that is, yho not even three times what I used to look after. It's, it's huge and it keeps me up at night. Do I feel anxious and inadequate? Yes... (Participant 8) Literally, when I have to do something, I always feel like I don't know nothing. Like I literally have to all my, yeah, I have to check with myself to do. Am I the girl that received the PHD? (Respondent 2)

A participant further indicated that they used to experience anxiety when completing a task in the earlier years of their career. Particularly if they did not feel that they were competent in the task. In their senior role they do not experience anxiety as the execution of tasks lies mostly as the responsibility of their team, rather than with them.

...so I used to only be anxious about things I know I am not that great at.. (Participant 18)

Participants further explained that their feelings of anxiety and inadequacy were caused by external factors such as the lack of representation of their demographic group in positions of leadership as well as a consistent sense of urgency in completing tasks, perpetuated by their manager. Related to the inequitable representation, the participant highlighted that the perception of exclusion as a result of a majorly male leadership team induced feelings of anxiety.

So in my current not in my role but in my environment, my environment is predominantly male dominated. Um and and, for a while I.... That was a factor because if you weren't one of the boys, you know, you're not one of the boys. Uh, so so that on its own, I think brings anxiety, uhm, because I think I bring a different leadership style (Respondent 3).

A participant further expounded that their feelings of anxiety were triggered by their manager who had created an environment where all tasks were required to be delivered on an urgent basis.

...My current manager causes everyone anxiety.....So you've gotta drop everything. Yeah. And I think that that's what causes the the anxiety, because, everything is like urgent... (Respondent 1) In addition, a participant shared that their feelings of inadequacy were triggered by requests from senior professionals or clients. She detailed that she begins to doubt her capabilities and whether she will be able to deliver the ask, to a satisfactory level.

When I get, a request from senior management or a senior customer. Then I start questioning like, um, when, if, if I deliver this, will I deliver it on the same level as they wanted? Is it, is it going to be good enough? Because then it, it has that self-doubt as well to say, you know, I don't, I don't know whether I'll deliver the way the, the, the person wants it (Participant, 10).

### 5.3.1.5. Conclusion: Proposition 1

The data collated confirms that most black women in the ICT sector attribute their achievements attained in their careers to both capability and non-capability related factors. Additionally, some women believe that their character traits also played an influential role in achieving their accomplishments. Furthermore, most black women in the sector suffer from feelings of anxiety and or inadequacy when completing tasks in the workplace. Although some women have identified that that the anxiety is induced by internal influencers as a result of their own perceptions of their capabilities, others, have indicated that theirs is caused by external stimulants such as the leadership structure and management style.

### 5.3.2. Proposition 2

The aim of this proposition was to affirm that the internal drivers of imposter syndrome in black female leaders in the ICT sector include; perfectionism, the requirement to be superwoman, deflection of compliments, fear of success and failure. Participants were asked whether they feel the need to be the best or to perfect a task. Additionally, they were asked of their perceptions of receiving praise, success and failure.

### Table 3 Proposition 2: Themes

Code	Code Groups	
<ul> <li>Individual feels anxious and wants to perform tasks perfectly</li> </ul>		
<ul> <li>Industry induced perfectionism</li> </ul>	Black female leaders want to perform tasks perfectly	
<ul> <li>Perfectionism driven by the need to avoid consequences</li> </ul>		
<ul> <li>Perfectionism is a trait of Imposter syndrome</li> </ul>		
<ul> <li>A need to be the best is influenced by the need to prove one belongs</li> </ul>	Black female leaders feel the need to be the best	
<ul> <li>Lack of representation creates the need to be the best</li> </ul>		
<ul> <li>Lower management level, experienced a need to be the best and is a</li> </ul>		
characteristic of imposter syndrome		
<ul> <li>The need to be the best is experienced</li> </ul>		
<ul> <li>Attributing praise to others</li> </ul>		
<ul> <li>Deflection of praise is a characteristic of imposter syndrome</li> </ul>		
<ul> <li>Praise is accepted when they feel it is well deserved rather than for</li> </ul>	Deflects or questions praise	
standard behaviour		
<ul> <li>Praise feels like its unwarranted</li> </ul>		
<ul> <li>Questions the genuineness of others praise</li> </ul>		
<ul> <li>Struggles with accepting praise</li> </ul>		
Praise is internalised	Accepting of praise	
Desire success	Desire Success	
<ul> <li>Has a vision board for their career, to be in c-suite</li> </ul>		
<ul> <li>Imposter syndrome does not impact the desire to be successful</li> </ul>		
Does not fear failure	Failure does not induce feelings of	
<ul> <li>Failure does not induce feelings of imposterism</li> </ul>		
<ul> <li>failure is perceived as a learning</li> </ul>	imposterism	
<ul> <li>Business perceives failure as a stumbling block, this induces feelings of</li> </ul>	Failure induces feelings of inadequacy	
inadequacy		
<ul> <li>Failure induces feelings of inadequacy</li> </ul>		
<ul> <li>Failure is perceived as hell on earth</li> </ul>		
<ul> <li>When failure is not accepted by superiors, it induces feelings of imposter syndrome</li> </ul>		

Source: Author's own

### 5.3.2.1. Theme 1: Black female leaders in the ICT sector want to execute tasks perfectly

Some of the participants shared that when completing a task, they aim to execute it perfectly without any error. A couple of the participants expressed that they identify with the term "perfectionist". A participant indicated that there have been instances where they have reviewed a task in excess of ten times in order to ensure that it was perfect as they perceived it would not be satisfactory for the recipient.

So I, I, I'm a perfectionist and I believe, I mean, they say that word doesn't exist, but when I'm doing something it, like I will go through it, more than 10 times to make sure that it's perfect. And sometimes I find that I am actually diluting the right things because I'm, I'm thinking it's not good enough for, for the next person. (Respondent 10).

A participant indicated that, her need for perfection in executing tasks discourages her from attempting tasks if the likelihood of success in that task is minimal.

So I'm one of those if, if, if something does not have at least an 80% chance of success, I, I don't do it because for me, success is key (Participant 14)

Participant 9 related that their perfectionism trait stemmed from their upbringing where she learned that she needed to complete tasks perfectly in order to avoid punishment from her parent. Therefore, in the workplace she still has the same perception, that in order to evade negative consequences, she has to complete tasks without any error.

What's driving me to, to want to do my work perfectly is, um, the fact that I was raised like that. I was raised to be, you know, if I'm not doing anything perfectly, then that means, uh, you know, and when you're doing things perfect, you actually avoiding a lot of stuff. You avoiding shame, you avoid, uh, being blamed for making certain mistakes. So, so, It's that. So it, yeah, it's basically how I was raised. Yeah. And I'm trying to avoid being in trouble. Yeah. Um, example, sorry. So example, if I don't get good grades at school, then um, and then obviously my dad would be upset about it and ask me questions. Um, around why, why didn't I get those good, good grades? So, so, so basically all of that type of, I don't know how to shape it, but, but that actually made me, it's ingrained within me that if you don't do well, um, then there will be consequences. So I'm trying to avoid those consequences.

### 5.3.2.2. Theme 2: Black female leaders in the ICT sector want to be the best performer

Some participants indicated that they felt the need to be the best performer in relation to their colleagues when completing tasks. A number of participants narrated that the feeling of being superwoman was induced by the requisite to validate that they belong in that environment and equally deserve to be there. ... I have found myself not just performing for me, but performing so that I can prove that I belong as much as everyone else...(Participant 4)

Something that already puts a spanner in the works in the ICT industry. Being a woman, is then another factor that, you know, adds, um, to your overall experience. And then three, being black, you know, let's, let's face it with, we know our history. Um, and, and so those, those three factors, immediately when you walk into a room, demand that you work 10 times harder to prove that you deserve a place, you know, at that seat or in that room (Participant 11)

Some participants highlighted that they mostly felt the need to be the best performer particularly when they were in lower management roles and that the necessity was influenced by; the lack of gender diversity, as they felt they needed to outperform their male counterparts to prove they belonged, similarity in roles held with counterparts which increased competition as well as new job roles.

In the past way, for example, we joined as service managers for different business unit and there were about five of us. Definitely always told myself, I'm the head and I'm not the tail. I will, you know, I will work and I will show up and I will, I will be the best. And so, so definitely there cos we were at the same level, same role, just looking after different business units (Participant 8)

I wanna make sure that I stand out. I wanna make sure that my work is, is better than my counterparts. But I feel like I'm always pushed in that corner because, um, I always feel the need to prove myself.....I feel like I have to, you know, be better than my, my male counterparts especially. Yeah. So I always want to be better than the men (Participant 9)

I think it used to be a thing uhm, early on in my career, and I think every time I make a job move purely because, uh, still like I if I look at my current team, I'm the only female in terms of the my managers directs. Uh, so there's six of us and I'm the only female. Umm. And then prior to starting, IT I mean it's all guys, guys starting out technical uhm there still that, uh, we've got to work 10 times harder than a male. We've gotta prove ourselves on all levels. Uh, they only see you as an admin, and when you actually, you know when you speak and you're like, but should we not do *XYZ*? And then it's like Ohh you, actually technical so that, it's constantly there... (Participant 1)

### 5.3.2.3. Theme 3: Black female leaders in the ICT sector deflect praise

Most participants recounted that they are not accepting of praise received from others. Participants explained that they struggled to accept praise when they assessed that it was unwarranted as it was relating to performance that they deemed to be basic. Additionally, they tended to minimise the praise when received. Other participants indicated that they tend to question the authenticity of praise received, often wondering if the praise is legitimate. Additionally, participants were inclined to share in the praise received with the rest of their teams.

I guess as women, I'm just trying to think of it. It's, it's, there's some instances where it's like, when you are praised, and it's like you, and I've done this a lot actually, where you're like, um, you know, thank you, um, and thank you for your support i.e. I could not have done this without your support. So it's always wanting to share in that praise (Participant 16)

Um, I feel like, is it really, um, am I really doing a good job or are they just praising me because, I'm not seeing what they're seeing. Um, I mean, sometimes when I get our CTO saying, Oh, you're doing a good job for the customers placing you 1, 2, 3, then I'm like, I feel like this is just basic work. Why are they praising me? I'm never fulfilled to say, you know, take it and run with it. It's, it has it, it's got that, but you know, it's just basic. You could have done more (Participant 10).

### 5.3.2.4. Theme 4: Black female leaders in the ICT sector are accepting of praise

Some participants however, were accepting of praise received by others. They narrated that they perceived the praise to be an affirmation of their efforts.

Additionally, participant 7 felt that their work was praiseworthy and had no qualms internalising praise.

No, definitely I'm accepting of the praise cos I, I, I put my all, when, when I do my work, I, I put all my efforts and, and for it to be recognized, I, I, it doesn't feel like, hm, I don't deserve that. Thank you. No, I don't, I feel like I do deserve that. Thank you. I did put some work. I did go an extra mile for you, you see, so I, I do, I I do accept it.

### 5.3.2.5. Theme 5: Black female leaders in the ICT sector desire to be successful

Most of the participants described that they desire to be successful in their careers. Some participants indicated that they still have aspirations to be in C-suite positions. Participants however, highlighted that the definition of a successful career is subjective, resulting in some participants having a more holistic definition of what success looks like in the context of their career. Some participants indicated that they have defined their success as work life balance rather than career progression. Participants further shared that they not only desired success for their own benefit, but for the benefit of other black women aspirant to have careers in the sector and to redress the lack of gender representation in positions of leadership in the sector.

I think we all want to be successful. Uhm, it's what is success? You know? I think that's ever changing. Uh, what is success, what success meant for me, Uh, before covid was climbing that corporate ladder. What success now is is just balancing work and not, uh, not making work, your everything (Participant 1)

Um, and I've mapped out how to get there and I am on the right track. So, um, do I want to be successful? Definitely. I, I, I, I had a. I don't know if you know, but I had a company, a mentorship company, um, called on (name of mentorship company) about women in ICT and we worked a lot on the stats, and the more you work on the stats, you realize, oh, at the bottom there's a lot of us black females, but at the top, um, it's not that much and it's not just at the c-suite level but even at board level, you

don't have, um, the right, the right number or, or the right level of representation for black women, right? So, Um, I definitely want to get to that point, um, where I get to sit on multiple boards where I get to C-suite (Participant 8)

Participant 4 further narrated that they perceived success in their career to be an absolute factor, particularly as a young black female.

I mean, success is not a, an is not a negotiable, right? One. I think as a, as a young black woman I'm always aware of the context in which I exist in. I'm always aware of the responsibility that I have, um, whether people are watching me or not, in learning how to stand in the light and be seen.

## 5.3.2.6. Theme 6: The perception of failure by Black female leaders in the ICT sector induces feelings of inadequacy

The majority of participants narrated that they perceived the experience of failure negatively. Some participants indicated that they grappled with failure and accepting it, often chastising themselves for failing at a task.

....actually I beat myself up to say but, why did you not see this? Why have you not planned and researched further on this topic? (Participant 10)

....I don't take kindly, maybe I'm not kind to myself when I do fail, you know. I'm, I'm kinder to the next person when they fail. But if it's me, I feel like you should know better (Participant 2)

Other participants indicated that their perception on failure had evolved from their earlier years whereby they initially viewed failure as an indication of their inadequacy. In recent years they have begun to view it as a learning opportunity.

*Um, I feared failure it and being a perfectionist as well, it didn't help much because it seemed like, um, I was either not good enough or not prepared enough or a misfit. Um, but the older I grow, it's something that I appreciate in that it inspires growth. It inspires room, you know, for, for improvement room for, um, unlearning and relearning. So, it's not really as negative a thing as we might have been conditioned to believe growing up, but actually a great opportunity for, for learning (Participant 11).* 

Some participants detailed that their perception of failure was influenced by the reception of the failure in their organisations, citing that at times organisations and management in organisations are not as forgiving when it comes to failure, therefore, negatively impacting their perception of failure.

Um, but I think sometimes the businesses probably don't give you the sense that failure is okay and we can recover or fix it. And maybe more so the, when you're in sales organizations, the sense is, there's no room for error or there's no room for failure.... Because corporate doesn't forget failure. They, they remember the failure and you held to task on, on the failure (Participant 17)

I think it's the reaction towards the failure. So it's it's you failed at a task. It's then how that is received by my superior. So if I get, "hey actually you know what, this didn't meet the mark but you know let's do XYZ" it's not so bad but you get a thrashing. You like shucks. (Participant 3).

### 5.3.2.7. Theme 7: The perception of failure by Black female leaders in the ICT sector does not induce feelings of inadequacy

Although most of the participants, default was to view failure in a negative light, some shared that, as they have matured, they have begun to perceive it as a learning opportunity rather than something to be feared. Others indicated that they had come to embrace failure. Some participants, therefore, have both a positive and negative perception of failure.

...So I, I never, I never blame or, or feel incompetent or, or anything like that. If, if I don't, if I fail in something (Participant 7)

So, so failure for me, I, it's not a, it's not something that scares me anymore. It's actually. Uh If you wanna put it in the words of criticism, I take it as positive criticism because it means I can go back and correct my mistakes, hence, but earlier in life shame I would cry and sob, and you know, But no, these days I'm like, no, I think you need some, somehow you needed to repeat this one so you can understand it better (Participant 12)

### 5.3.2.8. Conclusion: Proposition 2

The narrations indicate that some black women in the ICT sector are perfectionist in nature requiring multiple reiterations of some tasks in order for them to believe that the task is good enough to share with others. Some women feel the need to be the best performer in relation to their colleagues, particularly male colleagues in order to prove that they belong in the untransformed ICT sector. Most of the women tended to doubt the genuineness of praise received particularly when they have determined their performance to be on par with basic standards of performance. Other women however, embraced praise when it was received. The majority of the women had aspirations of achieving success in their careers, however, the definition of success was determined to vary, with some participants having a broader definition of success, which was beyond career progression, but included factors such as work life balance. Most of the females detailed that they had a negative view of failure leading to feelings of inadequacy, some of the women however, acknowledged that their negative perception of failure had changed as they aged, no longer fearing failure but accepting it as a learning journey. Some of the women had fully embraced failure as a learning.

### 5.3.3. Proposition 3

This proposition purposed to affirm that confidence in ones belief can minimise the experiences of imposter syndrome in black women in the ICT sector. Participants were asked to assess their confidence levels in relation to their capabilities in the workplace.

#### Table 4 Proposition 3: Themes

Code	Code Groups	
<ul> <li>Confidence can mitigate feelings of inadequacy</li> </ul>		
<ul> <li>Confidence in abilities is attributable to knowledge one has</li> </ul>	]	
<ul> <li>Confidence in ones abilities does not reduce imposter syndrome where one is</li> </ul>		
doing tasks for the first time		
<ul> <li>Confidence in ones abilities was influenced by experience (having succeeded in a specific role)</li> </ul>	Self efficacy	
<ul> <li>Confidence in ones capabilities does not fully mediate feelings of imposter syndrome</li> </ul>		
Very confident in specialist abilities		
Very confident in their own abilities		

Source: Author's own

### 5.3.3.1. Theme 1: Black female leaders in the ICT sector are confident in their capabilities

The participants majorly narrated that they were confident in their abilities in the workplace context, while some indicated that they were supremely confident in their competencies. Others shared that although they mostly had belief in their capabilities, this belief at times fluctuated based on their proficiency of a task. In instances where they were attempting a task for the first time or a task that was outside the scope of their usual technical responsibilities. Participants elaborated that their confidence was influenced by their previous experience and knowledge acquired.

...so I feel confident in my abilities here (Participant 18)

... I'm not confident about management and I think it has to do with, It being new and it being a learning process and never having had to do it before.... Umm, from a specialist side, I'm 100% confident (Participant 6)

*I am. I am very confident* (Participant 8)

### 5.3.3.2. Conclusion: Proposition 3

Participants explained that they are fairly confident in their competencies. The confidence is influenced by the knowledge and experience they have acquired. However, the confidence can at times fluctuate when the task is unfamiliar.

### 5.3.4. Research question 1

The research question aims to understand the environmental factors that induce feelings of imposter syndrome in black women leaders in the ICT sector. The participants were asked to narrate, whether experiencing bias and lack of representation impacted their perception of their capabilities as well as the accessibility of leadership roles. Additionally, participants were requested to elaborate on organisational cultures they have been exposed to and if they had influenced their feelings of competency. Lastly, participants were asked to reflect on whether they felt that their contributions were accepted in their organisations and if, those experiences had an impact on how they felt about their capabilities.

### Table 5 Research questions 1: Themes

Code	Code Groups	
<ul> <li>Lack of gender and racial representation in leadership positions does not impact perception of accessibility of positions</li> <li>Being the first female executive does not result in self doubt</li> <li>lack of representation does not impact ones perception of the</li> </ul>	Lack of representation does not impact the perception of accessibility of leadership roles	
accessibility of leadership positions, its mentorship that matters		
<ul> <li>Being in the minority, can make one feel like they go to work to prove a point</li> </ul>		
Being in the minority (black female) influences feelings of imposter		
Being the only woman in a role can make one question their capabilities		
<ul> <li>In environments with no diversity, women feel they experience glass ceiling</li> </ul>		
<ul> <li>Lack of representation results in perception that leadership positions are inaccessible</li> </ul>		
<ul> <li>Lack of representation can limit opportunities to black women</li> </ul>	Lack of representation makes positions of leadership seem	
<ul> <li>Lack of representation makes positions of leadership seem inaccessible</li> </ul>	inaccessible	
<ul> <li>Lack of representation makes women feel like they have to leave in order to progress</li> </ul>		
<ul> <li>Lack of representation, does negatively impact women's</li> </ul>		
aspirations to be in leadership roles		
<ul> <li>Lack of representation makes some roles difficult to attain</li> </ul>		
Lack of representation makes women feel that they need to leave an organisation in order to progress		
Representation makes leadership positions seem attainable and inspire career ambition		
Ageism and gender bias do not result in self doubt		
<ul> <li>Experiencing ageism does not impact ones perception of their capabilities</li> </ul>		
• Experiencing gender and maternal bias does not make one guestion their capabilities	Experiencing bias does not negatively impact ones perception of their abilities	
Gender and age bias do not negatively influence ones perception     of their capabilities		
<ul> <li>Gender bias does not result in feelings of imposterism</li> </ul>		
Gender, racial and age bias do not result in self doubt		
<ul> <li>Maternal bias does not make one question their capabilities</li> </ul>		
<ul> <li>Racial bias does not result in self doubt</li> </ul>		

Source: Author's own

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Code	Code Groups	
<ul> <li>Ability to deliver leads to success</li> </ul>		
Ageism, racial bias and networking bias (who you know) results in		
one questioning their capabilities	Experiencing bias results in self doubt	
<ul> <li>Being exposed to gender and racial bias results in self doubt</li> </ul>		
<ul> <li>Gender bias results in feelings of self doubt</li> </ul>		
<ul> <li>Gender, racial and age bias do result in self doubt</li> </ul>		
<ul> <li>When younger, gender and racial bias resulted in self doubt</li> </ul>		
When ones contributions are questioned it influences feeling of		
self doubt and questioning ones worth		
<ul> <li>Where individuals' contributions are not heard it makes them</li> </ul>		
question the value that they bring		
Where one does not feel heard it does not result in self doubt	When individuals are not heard they experience self doubt	
Where one had to fight for their contributions to be heard, self		
doubt was experienced		
• Where one has to fight for their contributions to be heard, they felt		
they had to have their facts in order before contributing		
• Where ones contributions are ignored/they do not feel heard, it		
negatively impacts how they view their capabilities		
	When individuals feel heard their confidence in their abilities	
· Feeling heard increases confidence in ones quality of contributions	is boosted	
<ul> <li>Colleagues comments (this job is too bog), can lead to self doubt</li> </ul>		
particularly during hard times.		
• Disparaging comments (You are not leadership material) results in		
self doubt		
<ul> <li>Individuals making you feel like you are not enough</li> </ul>	Disparaging comments from colleagues can induce self doubt	
• People's negative perception of ones capabilities (e.g. you are not		
ready) induce feelings of imposter syndrome		
• When people vocalise the doubt they have in your capabilities it		
results in self doubt		
<ul> <li>Competitive and high performance culture results in self doubt</li> </ul>	-	
Competitive culture results in individuals questioning their abilities		
<ul> <li>Fixed mentality culture makes one question their abilities</li> </ul>		
<ul> <li>High performance culture results in self doubt</li> </ul>	Organisation culture influences imposter syndrome	
5 1		
<ul> <li>Kumbaya/human centred culture influences feelings of self doubt</li> </ul>		
<ul> <li>Toxic high performance culture increases feelings of inadequacy</li> </ul>		
Competitive and high performance culture does not result in self		
doubt		
Competitive, high performance and fixed mentality culture do not		
impact ones perception of their capabilities	Organizational culture does not result in self doubt	
Fixed and competitive culture do not result in self doubt		
•		
<ul> <li>Fixed mentality do not result in self doubt</li> </ul>		
•		

Source: Author's own

## 5.3.4.1. Theme 1: Lack of racial and gender representation in positions of leadership in the ICT sector makes those positions seem inaccessible to black female leaders

The majority of the participants narrated that they observed that the sector was largely untransformed, evidenced by the leadership positions being occupied by largely white males. This lack of representation of their gender and racial group in leadership positions made them perceive those positions to be inaccessible or difficult to access.

Participant 1 indicated that the gender inequality in leadership positions, made her perceive that opportunities were limited to attain those roles as she would question why people who look like her are not occupying those positions.

It doesn't, from a from gender and a race not so much, not so much. Uhm, race, I think it's just gender. It makes you feel like there's no opportunity. Just as a female. Uhm, why? It makes you question is it, what is it? You know you always have that question. Uhm, what is it? what do I need? What do I need to get there? Because I don't see. So you always looking for, is there someone like me up there. Why isn't there that someone? What does it take? You know, those those questions are never clear.

Some participants detailed that they are often times the only black woman in rooms in the workplace which they described as a daunting experience.

I've always found, you know, starting off and actually where I am right now, I walk into a room and most times I'm the only woman. Um, most times I'm the only black or one of a few blacks, so already with that it's, it might not be the people that you're meeting with, but the environment itself that is either daunting or intimidating (Participant 11)

Other participants expressed that they believed that the lack of access for black women in these positions was also influenced by deliberate corporate structures. Some participants referred to these as the "all boys" club, which they narrated actively limited access for black women or applied new additional requirements on black women in order for them to progress, requirements that they felt would not necessarily be equally imposed on men.

They don't feel accessible. To be honest, um, and even when I put it as a goal, as something I want to go after, there's so many blockers and hindrances and I almost

feel like sometimes it's new things that are brought on that typically would not have been applied to a white male when he went in there at the time he went in there. (Participant 13)

Additionally, some participants explained that they felt that, at times, they felt that they had reached their glass ceiling and would need to leave the organization in order to progress into leadership positions.

Every time, one, wants to progress, you feel like you need to get out of the organization for you to progress, you feel like, Let me go try somewhere else. Maybe they do consider female roles (Participant 7)

Participant 3 indicated that the lack of representation of black women in leadership positions impacted their desire to pursue those positions.

I think subconsciously, yes. Because, uh, honestly, it's. I haven't thought of branching into tech, so if I leave my current role, I would want to go into a business role. Uhm, and leave tech because I I think there is more acceptance there on women leaders. Yeah. So yes, it has impacted my aspirations.

# 5.3.4.2. Theme 2: Lack of racial and gender representation in positions of leadership in the ICT sector does not make those positions seem inaccessible to black female leaders

Some women although acknowledging the representation gap in the sector, narrated that they perceived the positions of leaderships to still be accessible to them. Some participants indicated that the lack of representation acted as a motivator, to aspire for and attain those positions so that they can create more opportunities for black women in the sector.

No, it didn't. It made, it made those aspirations, um, difficult to attain, but it did not fundamentally change. Um, you know what I wanted. (Participant 16)

So, so for me, seeing that there was no representation that they feel. Made me want to do more, made me say, But why? What can I do to get there? And that's why my philosophies, when you get there, how do you bring the rest of the other women? (Participants 15)

Participant 10, elaborated that her view of the accessibility of positions in light of the underrepresentation of black women was partly influenced by her upbringing as she was raised by a white male, making her oblivious to the nuances of racial inequity.

I, I think I do, and at times, I don't know if I'm naive because of the environment that I grew up in. Um, um, I was raised by a white male, so I've only started learning about the segregation of, you know, I, I knew it was there, but obviously in my world, It, it was not existing, but I, I believe that the, there is a room for, for black women.

Participant 18, expressed that although they were the first female executive in their organisation it did not induce feelings of self-doubt. Additionally that she viewed positions of leadership to be accessible, partly due to the consistent affirmation she received during her high school years, as she attended a leadership school and was exposed to various people in leadership positions and was consistently affirmed as a young leader.

And oh, another thing is like I went to a leadership school in high school and there we met like all sorts of people executives, presidents, ministers. You spoke to them, there was a lot of like, Um, personality building, confidence building. You were already told, you are the crème of Africa..... But, there was that constant affirmation that you will be a young, you are a young leader, you will have a place in this world, you will make a change

### 5.3.4.3. Theme 2: Experiencing bias can lead to self-doubt

Some participants recounted that experiencing bias in the work place had induced feelings of self-doubt. Participants expressed how being exposed to racial, age and gender bias had made them question their capabilities.

Yes. So many times. So many times over and over where you are just like, okay. Do *I*? Am I even as skilled as I think I am? Maybe I'm just like in this bubble where I think I'm a specialist in this area. I've had situations where, you know, we've had, let's say a joint meeting and somebody who's not a specialist in my area, so I've been brought in as a specialist and someone who's not a specialist will want to talk over you. (Participant 16)

Participant 15 indicated that experiencing bias influenced how they perceived their abilities in the earlier years of their career, however as they came of age, they accepted the bias and focused on believing in their abilities.

So at the beginning when, I mean, when I was still young in my career, I did, um, cause I guess as, as a woman, you, you, you, there's perception that you always have to work hard other than male counterpart..... So at the beginning it did, but I think the more I matured, I realized it's. It's, it's people's biases. I can't change them, you know? I just have to show up and as myself, um, and believe in what I'm bringing to the table. It's good enough.

### 5.3.4.4. Theme 3: Experiencing bias can lead to self-doubt

For other participants however, experiencing gender, maternal, racial and age bias did not impact how they perceived their capabilities. Some participants explained that they were aware of their capabilities, therefore the bias they were exposed to, did not negatively impact how they viewed their capabilities. Participants were therefore able to disassociate their abilities from the bias.

No, because I know. I know what I'm there to do. I'm there to do the job. I can do it just as well as a male counterpart. (Participant 1)

...biases are always an, whether direct, or, indirect they're, always an, an invitation to explore. Um, tell me more. Right? Um, I've never viewed it as a, as an attack on, on what I bring to the table in my capability (Participant 4)

### 5.3.4.5. Theme 4: When black women do not feel heard, they doubt their contributions

Some participants shared that in instances where their contributions were not adequately acknowledged in the workplace, they began to doubt their voice. Participants narrated that in instances where their viewpoints were questioned by colleagues, when they felt that they had to convince colleagues in order to be heard, or where they perceived that they were simply not being heard, those experiences negatively influenced their perception of their capabilities.

...And so when people started questioning, um, the contributions I was bringing, I I, I definitely went through a period where I questioned myself, uh, where I questioned my worth (Participant, 4)

Participant 15, indicated that their experience of being partially heard, made her question her contributions particularly in scenario's where the contributions were of importance to her or of a strategic nature

Sometimes it did. But not always. Sometimes it did, especially if it was something that's important of a strategic nature and I believe that it has impact.

Additionally, participant 3 highlighted that feeling as though her viewpoints were not being sufficiently recognized not only made her question the caliber of her contributions but also influenced her decision to leave the organization

It did, it did. It made me feel like I didn't know what I was doing. Yeah, and, that's why I left because, It was getting to my head.

### 5.3.4.6. Theme 5: When black women feel heard, they gain confidence

Participants described that instances where they perceived that their contributions were appropriately recognized, it increased the confidence they had in the quality of their contributions.

It, it gave me confidence, I must say. It gave me confidence of the fact that I should not doubt myself but I should back myself up (Participant 5).

Participant 16, highlighted that in environments where she has felt heard, not only has her confidence increased but she is also been more vocal in sharing her viewpoints.

Definitely yes. And my voice is a lot louder in those spaces. Yes.

### 5.3.4.7. Theme 6: Disparaging comments from colleagues regarding a black women's capabilities can induce self-doubt

Some participants narrated how they were at times exposed to negative comments from colleagues as well as superiors which made them doubt their capabilities. Participants described how, in certain instances they were told that they were not suitable to occupy certain senior roles due to the perceived lack of experience and competence.

Also, I didn't feel like I was mature enough for the role. Cause someone had said to me, I think you need three more years to be prepared. And that rang in my head a bit too much and you know, kind of framed all my thoughts.... the reason I got anxious and terrified, was one because someone told me that, you know, you shouldn't be in that role (Participant 5)

Participant 17, however, had a different experience when a colleague indicated that a role was not appropriate for her, instead of questioning her abilities, she was motivated to pursue the role, however, she would become cognisant of the comment during periods of difficultly.

My then leader said, I think the job you're taking is too big. I don't think you'll survive. And I did the job successfully for three years, you know, off the back of somebody who I trusted saying that they thought the job was too big and I wouldn't be able to do it... it just made me more aggressive about it. I didn't, I will say though, for the three years, it's something that sits at the back of my head. I think initially, you know when, when you are dealt a challenge, that comment creeps up and it comes to, it catches up with you.

### 5.3.4.8. Theme 7: Organisational culture does not influence self-doubt

The majority of the participants narrated that high performance, competitive and fixed mentality organisational cultures do not induce feelings of inadequacy. Some participants indicated that they enjoyed working in high performance and competitive environments and felt as though they belonged in such environments and they inspired them to show up at their best. Some participants drew a distinction between a healthy and non-healthy organizational culture, indicating that healthy organizational cultures did not negatively their perception of their abilities.

...So, yeah, I, I, I love environments like that, I love environments that are competitive, high performance. I love them (Participant 5)

So I 've always, like I said, I, I feel like I, I've always, I'm a good fit for those environments. Uh, but I, I never, I never doubted... (Participant 9)

### 5.3.4.9. Theme 8: Organisational culture influences feelings of self-doubt

Some participants indicated that organization cultures that are high performing, competitive and human centred influenced feelings of self-doubt. A participant narrated that they felt the need to overcompensate through acquiring knowledge and doing more in the workplace in order to quieten the self-doubt induced by their competitive organisational culture.

It did. But then my my my response to that questioning was, to do more, to study more to, you know, to perfect more, to, you know (Participant 2)

A participant described their organization culture as 'kumbaya', a culture centred on people. The participant indicated the slow pace of this culture made them question their abilities as the feedback was received at a slower rate than high performance culture.

...And now that I am in an extremely human environment, um, that is almost at a slower pace, I have doubted myself more than I have ever done in my career.... Um, and at times I found myself questioning whether I'm doing enough, right? Whether, yeah, the culture's slow, but has maybe my capability dropped? (Participant 4)

### 5.3.4.10. Conclusion: Research question 1

The narrations of the black women highlighted that racial and gender representation, in positions of leadership matters, and that the lack in representation can lower career ambition is some women due to their perception of inaccessibility of those positions. Additionally, for some women, the lacking representation either had no impact on their career aspirations or acted as a motivator to be an agent of change in those positions. The data further indicated that some women when exposed to forms of bias, question their capabilities, whereas others, are aware of their abilities, as such their perception of their abilities is not impacted by the bias. Furthermore, the majority of the black women felt affirmed when their contributions were acknowledged in their organisations, while others felt inadequate when their viewpoints were ignored. In Addition, the data revealed that hearing disparaging comments relating to their capabilities, can induce self-doubt in black women. Lastly, the data indicated that for the majority of the women high performance, competitive and fixed mentality organisational cultures do not influence feelings of inadequacy. Some however, indicated that high performing, competitive and human centred organisational cultures induce self-distrust.

### 5.4. Conclusion

This chapter reported the data, in the form of narrations of the study partakers in response to the questions posed to them as presented in the interview guide. The questions posed to the participants were formulated with the purpose of addressing the research propositions and question. The findings from the thematic analysis were detailed based on the accounts of the study participants. Additionally, where



participants highlighted new or unexpected insights, that were useful to the further understanding of the internal and contextual influencers of feelings of imposterism among black women in the ICT sector, these were also reported. The next chapter involves the discussion of the findings identified in comparison with the literature reviewed on this subject.

### 6. Chapter 6: Discussion

#### 6.1. Introduction

This study sought to explore the influencers of imposter syndrome in black women in the ICT sector. Additionally the study aimed to understand the mediating role selfefficacy could have in combating feelings of imposterism. In Chapter 5, the results of the study were reported based on the responses of the participants as it related to the three propositions and single research question constructed in Chapter 3. This Chapter aims to present the discussion of the reported findings in relation to previous studies that have investigated the imposter phenomenon.

### 6.2. Discussion of the findings

### 6.2.1 Proposition 1

The findings of this study indicate that black female leaders in the male dominated ICT sector of South Africa experience feelings of imposterism. The black females participating in this study divulged that they experience feelings of anxiety and inadequacy when executing on tasks in the workplace. Additionally the participants revealed that the feelings of anxiety and inadequacy were in some instances induced by their perceived lack of competency, experience and knowledge. This finding is consistent with the arguments presented by Clance (1985) that individuals that experience imposterism, tend to feel anxious and question if they are good enough when executing a task. Clance (1985) further theorised that imposterism sufferers emphasise their lack of skill and understanding rather than their achievements when performing a task. The results further confirmed Hutchins et al. (2018) study, that imposter syndrome sufferers present with feelings of self-doubt as well as anxiousness.

The findings of this study further revealed that the feelings of disquietedness experienced by the black female leaders is not only self-induced but it is also induced by external influences such as the underrepresentation of black females in leadership positions, as it fosters the perception of exclusion, perpetuated by structures such as the "boys club". Additionally that some women find it difficult to identify with the leadership approach of majorly white male in positions of leadership.



The findings were in line with those of Arleo et al., (2021) whose study determined that feelings of imposterism can arise in individuals as a result of contextual influencers in places of work, particularly the lack of racial and gender diversity which sends subliminal messages that black females do not belong. The imposter syndrome emerges as a result of a lack of racial and gender diversity (Mullangi & Jagsi, 2019). Minority groups in these workplaces are restricted from structures such as the old boy network, by virtue of their demographic, therefore perpetuating the sense that they do not belong in those leadership positions (Khilji, 2021).

In addition, to the external influence of inadequate representation on feelings of worry in black women in the ICT sector, the study found that feelings of anxiety when completing a task were also induced by an urgency culture in an organisation facilitated by management. An urgency culture was described as one where all tasks are treated with the same level of urgency. The findings corroborated Nwaichi (2021) study that indicated that places of work in STEM related industries such as the ICT sector, epitomize, high performance cultures that are inclined to influence feelings of imposter syndrome.

The study further determined that black women in the ICT sector tended to ascribe their past accomplishments to external forces such as hard work, coaching, influential networks and support structures rather than their abilities. The attribution by individuals of their achievements to external influencers rather than their capabilities, is congruous with the findings of Clance (1985) and Mainali (2020), that the imposter cycle, which facilitates feelings of imposterism is perpetuated by the notion that external factors such as hard work and dedication are imputable to an individual's success rather than their capabilities such as astuteness. The study further confirms, the posits of Tiefenthaler (2018) and Gadsby (2022) who indicate that imposters feel the need to work hard in order achieve success. Additionally, Hutchins et al. (2018), found that imposter syndrome sufferers exhibited a flawed ascription of success.

This study however, found that black women in the ICT sector also believe that their achievements are as a result of capability related factors and inherent character



traits. Participants described their abilities as intellect, experience, knowledge acquired through formal education, versatility, taking initiative and accepting challenges. Whereas the innate characteristics were detailed as; determination, resilience, drive, genuineness, zeal and a positive attitude. This study therefore contradicts the findings of both Clance (1985), Tiefenthaler (2018), Gadsby (2022) and Hutchin et al. (2018) who posited that individuals suffering from feelings of imposterism accredit their accomplishments solely to external influences rather than their abilities. Although, the black women leaders participating in this study ascribed their achievements to external factors they were also aware and had an appreciation of the character traits and abilities that contributed to their success.

In addition, the finding of the study controvert the postulations of Chakraverty (2019) that, women in STEM related fields, which are naturally male dominated, had a misconstrued perception of their identity contributing to their feelings of imposter syndrome. Chakraverty (2019), further theorised that women in STEM sectors tended to ascribe their accomplishments to their identity, that is their gender and race and the need for organisations to achieve diversity metrics, rather than to their abilities. This study which was conducted in South Africa, a country with a history of prejudice and legislature such as BBBEE, which was instituted to redress the past and promote the progression of black people, including women, in positions of leadership, did not identify that black women in the ICT sector ascribed their success to their identity.

As such this study proposes that;

Proposition 1: Black female leaders in the ICT Sector of South Africa suffer from imposter syndrome characterised by the attribution of their success to external elements such as hard work rather than their abilities as well as feelings of anxiousness and inadequacy.

#### 6.2.2 Proposition 2

This study revealed that some black women leaders in the ICT sector identify as perfectionists. Propelling their intent to complete tasks without any error. The study



indicated that for some women, the need for perfection in completing a task was fueled by the belief that, the individuals work was not good enough unless they perceived it to be perfect. A process that required significant effort and at times induced feelings of anxiousness. The study further indicates that the requisite to produce perfect work for some women emanates from an individuals' desire to avoid negative consequences. In line with the requirement to avoid adverse outcomes, the study also identified that some individuals will go to the lengths of choosing to not attempt tasks in instances where they perceived that success was not a certainty.

The finding confirms the theories of Cockley et al. (2018) and Grubb III and Grubb (2021) that individuals that suffer from imposter syndrome pursue perfection as they possess the maladaptive perfectionism personality trait. The perfectionist trait is a precursor to experiencing imposter syndrome, as the individuals have high standards of performance that they attempt to attain, the non-attainment of which results in feelings of inadequacy. The findings of the study further affirm the views of Pannhausen et al. (2020) who theorised that perfectionists exhibited behaviour such as the doubting of ones capabilities. Additionally, Wester et al. (2020) study was further corroborated by the findings that imposter syndrome sufferers evade pursuing goals due to the possibility of failure.

The study found that some black women in the ICT sector feel the need to be the best performer at their places of work. This requisite to be exceptional was at times influenced by a need to prove that one is capable and belongs in the workplace, and in other times to be the leading performer in relation to colleagues. The need to prove oneself was sometimes driven by the underrepresentation of black women in the sector. The findings of the study were consonant with those of the Clance (1985) and Maji (2021) studies that suggested that individuals that experience imposterism exhibit the need to be supreme in their sector. Additionally, the study confirms Collins (2018) finding that the representation of ones gender and racial group in a STEM profession, validates their sense of belonging in the sector.

The findings of this study revealed that the majority of black women leaders in the ICT sector find receiving praise from others a challenge. The deflection of praise



arose particularly when the women assessed the praise to be unjustified as they perceived it to relate to expected performance standards. In addition, the deflection of praise was in some instances also influenced by the black women doubting the genuineness of the praise received. The study further identified that some women felt the need to share in the praise received with their teams rather than accepting it individually. The findings of this study support the postulations of Clance (1985) and Edwards (2019) that imposter syndrome sufferers tend to discredit compliments received for their efforts and find it difficult to accept and ascribe the praise to their capabilities. Additionally, the study indicated that some women fully embrace praise and feel that their performance outputs are deserving of the praise, although accepting of the praise these women attribute the praise to their efforts rather than their capabilities therefore further affirming the views of Clance (1985), Tiefenthaler (2018) and Gadsby (2022).

The study identified that black women in the ICT sector desire to be successful in their careers. For some women success is defined as career progression into c-suite positions, whereas for others success is defined more broadly to include factors such as work life balance. The study revealed that some women felt the need to be successful in their careers due to the perceptions surrounding their race and gender as well as to address the underrepresentation of black women in positons of leadership. Although contradicting the findings of the Clance (1985) and Neureiter and Traut-Mattausch (2016) studies that suggested imposters actively fear success, the study affirmed the views of Gadsby (2022), that imposters want to be successful as the black female leaders that participated in this study sought success, although, it was not consistently defined. The holistic definition of success by the women supported the study by Tulshyan and Burey (2021) which proposed that the structures within corporations were biased towards a male view for elements such as professional standards in leadership. Therefore, defining success may be informed by a narrow male view which relates solely to career progression. The pursuit by women of broadly defined success may be misconstrued to indicate lack of career ambition or fear of success.



The study revealed that black female leaders in the ICT sector largely perceive failure in a negative light. Some women wrestled with experiencing failure and often criticized themselves in instance where they had experienced failure. Other women, however, divulged that their negative perspective on failure was influenced by their organisational culture regarding failure. In organisations where failure is considered unacceptable it drives one to be overly critical of themselves when failure is experienced. The findings of the study confirmed the Clance (1985), Neureiter and Traut-Mattausch (2016) and Levant et al. (2020) theories that imposter syndrome sufferers are characterized by fear or non-acceptance of failure resulting in feelings of shame and inadequacy. Additionally, the study confirmed postulations by Arleo et al. (2021) & Cope et al. (2017), that fear of failure, which is synonymous with feelings of imposterism, can be induced by contextual factors such as organisation culture, particularly, a perfectionist organisation culture where anything less than perfection, such as failure, is not tolerated. The organisational culture therefore alters an individuals' perception of failure.

The study further revealed that some women's perception of failure was positive, as they reflected on failure as a learning opportunity rather than an indication of their inadequacy. Additionally, the women indicated that their view on failure had evolved as they matured from a negative to a positive perspective. Indicating that for some women failure is embraced rather than feared.

Therefore, this study proposes:

Proposition 2: The internal drivers of imposter syndrome in black female leaders in the ICT sector include; perfectionism, the requirement to be the best, deflection of compliments and fear of failure.

#### 6.2.3 Proposition 3

The study revealed that black women in the ICT sector were fairly confident in their capabilities in their places of work. With some participants expressing that they were highly confident in their abilities. Although some participants voiced that their confidence levels oscillated in instances where they were unfamiliar with a task. Additionally, some women indicated that their assurance in their abilities stemmed



from their experience and knowledge acquired. The findings of the study contradict those of Mehta et al. (2020) and Kumar et al. (2021), that assert that confidence in ones abilities has been found to be negatively interrelated with feelings of imposter syndrome. And that individuals presenting with excessive levels of self-efficacy were not susceptible to feelings of imposterism. The women expressed that they were overall confident in their abilities however, some had experienced bouts of imposterism. Additionally some women experienced imposterism during period when their confident fluctuated. This study therefore corroborated Schubert and Bowker (2019), theory, that individuals with fluctuating self-esteem, were prone to feelings of imposterism. The study further, confirmed Bandura (1977) findings that self-efficacy can be developed through gaining experience. The study further contradicted the findings of Marshman et al. (2018) who posited that women have lower levels of selfefficacy and that the lack of gender diversity can influence their feelings of self-belief. The women, although operating in a sector where females are grossly underrepresented voiced that they were confident in their abilities, with some highly confident. This study therefore proposes:

Proposition 3: Self-efficacy does not entirely minimize the impact of imposter syndrome in black female leaders in the ICT sector

#### 6.2.4 Research question 1

This study identified that the lack of gender and racial diversity in leadership positions in the ICT sector makes black women believe that those positions of leadership are inaccessible to them, some women even cited that it reduced their aspirations for positions of leadership. Additionally some women voiced that the underrepresentation of black women in the sector made them question why their racial and gender group are not adequately represented in those positions. Furthermore, some women expressed that, being the only black woman in certain workspaces made them feel lesser than. In addition, some women vocalized that their perception of the inaccessibility of leadership roles to black women was driven by existing anti-black women organizational structures which limited the access and opportunities for black women through exclusions to influential networks such as the "boys' club" and the imposition of additional requirements to progress that would not necessarily apply to men.



The findings of the study support that of Mullangi and Jagsi (2019) that indicated that feelings of imposterism are influenced by the lack of equality. In addition Andrews (2020) postulated that there are power imbalances and systematic corporate structures that reinforce feelings of inadequacy in individuals. Additionally the views of Arleo et al. (2021) were affirmed, that organisations with dominantly white males in leadership positions make it difficult for black women to envision themselves in those positions as they do not identify with the majority racial and gender grouping. Additionally the study confirms the Khilji, 2021 postulations that workplaces with leadership structures that are not equitably representative both in gender and race, are prone to non-inclusive organisational cultures and practices as well as exclusionary networks which impact individuals' sense of belonging. Furthermore, the findings are in line with Collins (2018) study which posited that the adequate representation of individuals racial and gender groups in STEM occupations, promotes a sense of belonging for the individual and further breaks down restricting beliefs regarding the potentiality of non-success in those occupations.

The study revealed that some women are aware of the underrepresentation of their gender and racial groups, however, they still viewed those positions as accessible. The participants voiced that they still aspired for those positions, with some indicating that the lack of representation inspired them further to want to aspire for those positions so that they can change the demographics. This finding contradicted the studies of Mullangi & Jagsi (2019), Andrews (2020), Arleo et al. (2021), Khilji (2021) and Collins (2018), that the underrepresentation of black women in positions of leadership makes those positions inaccessible to the women due to the limiting organisational structure, limiting their aspirations and belief of success in those roles.

Additionally, some participants voiced that their belief that the positions were accessible to them was due to the affirmations that they had received in their school years, that they were a leader. This finding supports that of Bandura (1977) that verbal assurance builds self-confidence in ones abilities. Additionally, it confirmed Collins (2018) postulations that one is required to be self-assured in their STEM related capabilities in order to develop a STEM identity which will minimize feelings of being a misfit and low self-esteem in the ICT sector (Rasmussen, 2018).



The study revealed that the experience of racial, gender and age bias in the workplace by black women in the ICT sector influenced feelings of self-distrust in some women. The finding confirm the postulations of Tulshyan and Burey (2021) that feelings of imposter syndrome are influenced by workplaces where bias, including gender bias, sexism and racial bias prevail.

The study further revealed that some women's perception of their abilities was not negatively impacted by experiencing gender, maternal, racial and age bias. Some women voiced that they were aware and assured of their abilities as such the bias did not induce self-doubt. This finding although contradicting that of Tulshyan and Burey (2021) that the encountering bias influences feelings of self-distrust, supported the theories of Mehta et al. (2020) and Kumar et al. (2021) that when an individual has self-confidence in their abilities they do not suffer from the imposter phenomenon.

The study identified that some women's perception of their abilities was negatively impacted by their contributions being ignored in the workplace. Additionally some women voiced that self- distrust was induced in instance where; their contributions were doubted, they had to excessively justify their viewpoints or their contributions were not acknowledged. The finding of the study affirms the postulations of Khilji (2021) that individuals that form part of underrepresented racial and gender groups in the workplace have had their contributions overlooked inducing feelings of imposterism. Arleo et al. (2021) theory was also confirmed by the study which indicated that ignoring the viewpoints of individuals, destroys their self-confidence ultimately influencing feelings of self-doubt.

The study also revealed that when black women in the ICT sector believe that their opinions are adequately recognised, their confidence in their abilities is enhanced. This finding further corroborates the Khilji (2021) and Arleo et al. (2021) posits, that disregarding the contributions of individuals reduces their self-belief. Additionally the study affirms that of Bandura (1977) that verbal endorsement of ones capabilities improves their self-efficacy.



The study identified that when some black female leaders in the ICT sector hear discrediting remarks from superiors and co-workers, regarding their abilities, it negatively impacts their perception of their capabilities inducing feelings of imposterism. This finding is in line with that of Tulshyan and Burey (2021), who indicated that feelings of imposter syndrome arise due to bias experienced by women in the workplace. The bias emanating from the fact that organisational structures are based on leadership, networking and professional styles of males.

The study revealed that high performance, competitive and fixed mentality organisational cultures do not induce feelings of inadequacy in the majority of black female leaders in the ICT sector. This finding contradicts that of Nwaichi (2021) and Canning et al. (2020) who asserted that organisation cultures that are high performance and competitive in nature influence feelings of self-doubt. However, the study also identified that some women's perception of their capabilities is impacted by being in high performing, competitive and human centred organisational culture, corroborating the studies of Nwaichi (2021) and Canning et al. (2020).

This study asserts that:

Proposition 4: External factors such as the underrepresentation of black women in the sector, exposure to racial, gender and age bias, organisational culture, inadequate acknowledgement of black women's viewpoints as well as the deprecation of the abilities of black women induce feelings of imposterism.

#### 6.2. Unexpected findings

The overall findings derived from the narrations of the participants were mainly in line with the expectations determined through the literature review. What was surprising to note was that the individuals did not identify their identity or black women empowerment related legislature as possible contributions to their achievements, particularly as they operate in South Africa, a country with a strong history of restitution initiatives particularly centred around black females.

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Additionally, the weak mediating role that self-efficacy has in relation to feelings of imposterism, gleaned from the participants' accounts that they are moderately confident in their abilities, yet they, further expressed that they struggle with feelings of anxiousness and inadequacy when completing tasks.

An interesting finding was also the women's ability to detach their perception of their abilities from some external prejudice such as bias. Some participants identified that the issue of bias is as a result of the biased individual rather than their abilities, discounting the bias as irrational.

# 6.3. Conclusion

This chapter presented a discussion of the research study findings by incorporating the study findings with previous studies on this subject matter. Chapter 7 offers justification for the conclusions reached in the study, details the implications of the study, the relevance of the findings to various stakeholders, highlights the limitations of the study and provides recommendations for future research studies.

# 7. Chapter 7: Conclusion

#### 7.1. Introduction

In this chapter the final conclusions of the study will be presented as determined from the discussions of the findings outlined in Chapter 6. First, the chapter details the conclusions reached relating to the study's propositions and research question. Secondly, the study further outlines theoretical and practical implications resulting from the study. Thirdly, the limitations of the study are described. Finally, this chapter details the ramifications for relevant stakeholders as well we the suggested future research directives.

The aim of the study was to ascertain the internal and external drivers of imposter syndrome in black women in the ICT sector as well as determine the impact that self-efficacy has on feelings of imposterism. In Chapter 2, a review of existing studies was undertaken, resulting in the identification of theoretical frameworks of imposter syndrome, professional identity, STEM identity and self-efficacy which formed the theoretical perspective applied in the study in order to achieve the aim of the study. The literature review in Chapter 2 formed the basis of the research propositions and question constructed in Chapter 3. A qualitative research method was adopted as informed by the nature of the study in order address the research propositions and question. Chapter 4 elaborated on the design of the research and methods employed to collect data. In Chapter 5, the results as obtained from the narrations of the participants were presented. The interpretation of the results in the context of the literature reviewed on this subject matter was performed in Chapter 6. This final chapter presents the conclusions reached on the research propositions and question, outlines limitations as well as directions for future research studies.

### 7.2. Conclusion on the research propositions and question

A brief summation of the main findings for the three research propositions and research question is presented in this chapter. The study recognizes that some of the results opposed a number of findings identified in the literature, however, the majority of the findings that were explained in Chapter 6, affirm, the findings as suggested by the past studies. The finding therefore, provide insights on which

factors, internal and external, influence imposter syndrome in black female leaders in the ICT sector.

# 7.2.1. Proposition 1

This proposition sought to affirm that black female leaders in the ICT sector of South Africa experience the imposter phenomenon, evidenced by the ascription of their achievements to external factors such as working hard rather than their capabilities and feelings of incompetence.

### Main findings

Black women leaders in the ICT sector of South Africa suffer from imposter syndrome, characterized by feelings of unease as well as inferiority when faced with a task in the workplace. The feelings of anxiety and inadequacy are influenced by internal and external elements. The internal factor relates to the women's perceived incompetence and lack of knowledge regarding the task at hand. The external factors relate to the lack of black women representation in leadership positions in the sector which cultivates perceived exclusionary structures and networks. Organisational culture, particularly high performance culture, is the additional external element which induces feelings of anxiousness in black women. Additionally, feelings of imposterism in black female leaders in the ICT sector is evidenced by their ascription of achievement to external factors such as hard work rather than their abilities. The women however, do not solely attribute their accomplishments to external elements, they are also aware of internal factors such as character traits and intellect which have contributed to their success.

# 7.2.2. Proposition 2

The second proposition aimed to confirm that imposter syndrome in black women in the ICT sector is influenced by internal elements particularly; the need to be perfect, the requisite to be superwoman, non-acceptance of praise and fears of success and failure.

### Main findings



Black women in positions of leadership in the ICT sector of South Africa, do not exhibit perfectionist traits. Additionally, the black female leaders do not feel the need to be the top performer in comparison with their colleagues. Furthermore, the black women leaders are discrediting of praise, often questioning its legitimacy and wanting to share in the praise with others. Contrary to previous studies, the black female leaders desire and pursue success in their careers, although their definition of success is broad, and is not solely limited to career progression. The findings of this study further revealed that the black female leaders have a negative perception of failure resulting in excessive criticism of themselves in instances when failure is experienced. Additionally, contextual factors such as organizational culture, especially those that do not embrace failure, have an influential impact on the women's view of failure.

### 7.2.3. Proposition 3

The aim of this proposition was to determine the mediating impact of self-efficacy on feelings of imposterism in black women leaders employed in the ICT sector.

### Main findings

Black women leaders in the ICT sector are fairly confident in their capabilities. The findings revealed that the women's confidence tended to vacillate in instance when a task was completed for the first time. Even though the women were self-assured in their abilities, they still experienced feelings of imposterism.

### 7.2.4. Research question 1

The purpose of the research question was to determine the contextual factors that influence imposter syndrome in black female leaders in the ICT sector of South Africa.

### Main findings

The findings revealed that the underrepresentation of black females in leadership positions in the ICT sector influences the perception that these leadership positions



are inaccessible to black women, at times reducing their career ambitions and inducing feelings of inadequacy. Additionally, the inaccessibility of these roles were perceived to be as a result of corporate structures and networks that deliberately limit the access of black women. Black women who felt self-assured in their capabilities, were not negatively influenced when experiencing gender, maternal, age and racial bias, as they were able to separate their abilities from the bias. The study revealed that, the adequate acknowledgement of the opinions of back female leaders has an affirming impact on them, boosting their confidence in their abilities. Additionally, the study revealed that when disparaging comments are directed towards black women concerning their abilities, it induces feelings of self-doubt. Furthermore, the study indicated that high performance, competitive and fixed mentality organisational cultures do not influence feelings of inadequacy in black women.

### 7.3. Contributions of the study

The study added a new perspective to the literature by showing that feelings of imposter syndrome in black females in the ICT sector of South Africa are influenced by both internal and contextual factors. The internal factors are non-acceptance of praise, fear of failure and inadequacy whereas the external elements are underrepresentation of black women and discrediting comments. In addition, the fear of failure, an internal factor of the phenomenon can be induced by external factors such as organizational culture. Additionally the study revealed that the factor of fear of success is not a contributor to the feelings of imposter syndrome in black female leaders in the ICT sector. An additional contribution to the literature is that self-efficacy, does not entirely mediate feelings of imposterism in black female leaders in the ICT sector.

### 7.4. Research limitations

Obtaining data on the internal and external factors that influence imposter syndrome in black females in the ICT sector was challenging as some of the participants in this study had been in the sector for a number of years and could not clearly recall their experiences of the internal and external factors based on their industry wide experience. Participants tended to exhibit recency bias in their responses. Relying on participants' recollection of perceptions and emotions made it challenging to determine if the memory is precise or a model response.

## 7.5. Implications for stakeholders

### 7.5.1. Black women leaders

This study will reduce the stigma associated with imposter syndrome in black females in the ICT sector. Black women will gain awareness of the internal influencers of imposter syndrome and be empowered to address these. Additionally women will be cognisant of the external influencers that are perpetuating their feelings of imposterism resulting in appropriate blame allocation for this condition.

# 7.5.2. Organisations in the ICT sector

Organisations will be aware that imposter syndrome is not only an internally influenced condition but it is also influenced by contextual factors which are in their control. Participants narrated that the underrepresentation of black women in positions of leadership in the ICT sector creates the perception that those positions are inaccessible to them; further cultivating exclusionary practices and cultures. At times this reduces their ambitions to be in those positions and encourages employee turnover. Additionally, the participants further described that their perception of success was not limited to career advancement, but also included elements such as work life balance. Therefore, the implication to organisations in the sector, is to create organisational cultures that are inducive to having a work life balance to promote the advancement of women. Additionally, it is for organisations to be more deliberate in addressing the leadership inequities that exist as they also impact the employee pipeline.

### 7.6. Recommendations for future research

It is proposed that for future research, a longitudinal study is conducted on black female leaders in the ICT sector, in order to determine if feelings of imposter syndrome are reduced in more experienced women compared to those in the early stages of their careers.



The current study was limited to black women, therefore, a further study can be undertaken to consider white women in the ICT sector of South Africa, in order to evaluate if their feelings of imposterism are impacted by the same internal and external influencers.

#### **Reference List**

- Alfred, M. V., Ray, S. M., & Johnson, M. A. (2019). Advancing women of color in STEM: an imperative for US global competitiveness. *Advances in Developing Human Resources*, 21(1), 114-132.
- Andrews, N. (2020). It's Not Imposter Syndrome: Resisting Self-Doubt as Normal for Library Workers.
- Aparna, K. H., & Menon, P. (2020). Impostor syndrome: An integrative framework of its antecedents, consequences and moderating factors on sustainable leader behaviors. *European Journal of Training and Development*.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants. International Journal of Qualitative Methods, 18, 1–8. <u>https://doi.org/10.1177/1609406919874596</u>
- Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, 1(2), 30-33.
- Arleo, E. K., Wagner-Schulman, M., McGinty, G., Salazar, G., & Mayr, N. A. (2021).
   Tackling impostor syndrome: A multidisciplinary approach. *Clinical Imaging*, 74(December 2020), 170–172. https://doi.org/10.1016/j.clinimag.2020.12.035
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited.JournalofManagement,38(1),9–44.https://doi.org/10.1177/0149206311410606
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice Hall: Englewood cliffs.
- Berndt, A. E. (2020). Sampling Methods. *Journal of Human Lactation*, *36*(2), 224–226. https://doi.org/10.1177/0890334420906850
- Booysen, L. A., & Nkomo, S. M. (2010). Gender role stereotypes and requisite management characteristics: The case of South Africa. *Gender in Management: An international journal.*

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative

Research in Sport, Exercise and Health, 11(4), 589-597., 1-20.

- Bravata, D. M., Watts, S. A., Keefer, A. L., Madhusudhan, D. K., Taylor, K. T., Clark,
  D. M., Nelson, R. S., Cokley, K. O., & Hagg, H. K. (2020). Prevalence,
  Predictors, and Treatment of Impostor Syndrome: a Systematic Review. *Journal* of *General Internal Medicine*, 35(4), 1252–1275.
  https://doi.org/10.1007/s11606-019-05364-1
- Browne, C., Wall, P., Batt, S., & Bennett, R. (2018). Understanding perceptions of nursing professional identity in students entering an Australian undergraduate nursing degree. *Nurse education in practice*, *32*, 90-96.
- Canning, E. A., LaCosse, J., Kroeper, K. M., & Murphy, M. C. (2020). Feeling Like an Imposter: The Effect of Perceived Classroom Competition on the Daily Psychological Experiences of First-Generation College Students. *Social Psychological and Personality Science*, *11*(5), 647–657. https://doi.org/10.1177/1948550619882032
- Chakraverty, D. (2019). Impostor phenomenon in STEM: Occurrence, attribution, and identity. *Studies in Graduate and Postdoctoral Education*.
- Chrousos, G. P., & Mentis, A. F. A. (2020). Imposter syndrome threatens diversity. *Science*, *367*(6479), 749-750.
- Clance, P. R. (1985). The Impostor Phenomenon: Overcoming the fear that haunts your success. Georgia: Peachtree Publishers.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, research & practice*, 15(3), 241.
- Cohen, E. D., & McConnell, W. R. (2019). Fear of fraudulence: Graduate school program environments and the impostor phenomenon. *The Sociological Quarterly*, *60*(3), 457-478.
- Cokley, K., Stone, S., Krueger, N., Bailey, M., Garba, R., & Hurst, A. (2018). Selfesteem as a mediator of the link between perfectionism and the impostor phenomenon. *Personality and Individual Differences*, 135, 292-297.
- Collins, K. H. (2018). Confronting color-blind STEM talent development: Toward a contextual model for Black student STEM identity. *Journal of Advanced*

Academics, 29(2), 143-168.

- Connley, C. (2021). A record number of women are now running Global 500 businesses. Retrieved from https://www.cnbc.com/2021/08/02/a-record-number-of-women-are-now-running-global-500-businesses.html
- Cope, A., Bezemer, J., Mavroveli, S., & Kneebone, R. (2017). What attitudes and values are incorporated into self as part of professional identity construction when becoming a surgeon?. *Academic medicine*, *92*(4), 544-549.
- Cullen, M., Calitz, A. P., & Motaung, L. (2022). Factors Influencing Women's IT Career Choice in South Africa. In *Conference on e-Business, e-Services and e-Society* (pp. 192-204). Springer, Cham.
- Daniel, B. K. (2019). What constitutes a good qualitative research study? Fundamental dimensions and indicators of rigour in qualitative research: The TACT framework. In Proceedings of the European Conference of Research Methods for Business & Management Studies (Pp. 101-108).
- DeCandia Vitoria, A. (2021). Experiential supervision: Healing imposter phenomenon from the inside out. *The Clinical Supervisor*, *40*(2), 200-217.
- Deloitte. (2020). The right mind-set: Approaching diversity South Africa. https://www2.deloitte.com/za/en/services/consulting-deloitte/the-right-mindset.html
- Devillard, S., Hunt, V., & Yee, L. (2018). Still looking for room at the top: Ten years of research on women in the workplace. *McKinsey Quarterly*, *2*, 106-115.
- Doyle, L., McCabe, C., Keogh, B., Brady, A., & McCann, M. (2020). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, 25(5), 443–455. https://doi.org/10.1177/1744987119880234
- Edwards, C. W. (2019). Overcoming imposter syndrome and stereotype threat: Reconceptualizing the definition of a scholar. *Taboo: The Journal of Culture and Education*, *18*(1), 3.
- Fitzgerald, A. (2020, July). Professional identity: A concept analysis. In *Nursing Forum* (Vol. 55, No. 3, pp. 447-472).

Gadsby, S. (2022). Imposter syndrome and self-deception. Australasian Journal of

Philosophy, 100(2), 247-261.

- Gasa, N. (2007). Feminisms, motherisms, patriarchies and women's voices'. *Women in South African history: They remove boulders and cross rivers*, 207.
- Gordon Institute of Business. (2017). Diversity and Inclusion in South Africa. Retrieved from https://www.gibs.co.za/news-events/news/pages/diversity-andinclusion-in-south-africa.aspx
- Government of South Africa. (2019). *Deputy Minister Pinky Kekana: Women in ICT* Session - South Africa. https://www.gov.za/speeches/women-ict-session-2-oct-2019-0000
- Grant Thornton. (2022). *Women in Business 2022: Opening the door to diverse talent.* https://www.grantthorntonci.com/globalassets/1.-member-firms/channel-islands/pdf-documents/global-news/women-in-business-2022-opening-the-door-to-diverse-talent.pdf
- Grubb III, W. L., & Grubb, L. K. (2021). Perfectionism and the Imposter Phenomenon. *Journal of Organizational Psychology*, 21(6).
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18(3), 326–339. https://doi.org/10.1016/0001-8791(81)90019-1
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods* (A. Owens (ed.); 2nd ed.). SAGE Publications Inc.
- Hutchins, H. M., Penney, L. M., & Sublett, L. W. (2018). What imposters risk at work:
   Exploring imposter phenomenon, stress coping, and job outcomes. *Human Resource Development Quarterly*, *29*(1), 31-48.
- Independent Communications Authority of South Africa. (2021). The State of the ICT Sector Report in South Africa.
- Internantional Labour Organization. (2019). Women in business and management: the business case for change. *https://www.ilo.org/wcmsp5/groups/public/--dgreports/---dcomm/---publ/documents/publication/wcms\_700953.pdf*
- International Trade Centre. (2020). African Market Trends in Technology Services. African Market Trends in Technology Services: 11 Country Profiles, ITC,

Geneva.

https://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Africa n IT and BPO Market Report\_20201109\_02.pdf

- Jaga, A., Arabandi, B., Bagraim, J., & Mdlongwa, S. (2018). Doing the 'gender dance': Black women professionals negotiating gender, race, work and family in post-apartheid South Africa. *Community, Work & Family*, 21(4), 429-444.
- Jonsen, K., Fendt, J., & Point, S. (2018). Convincing Qualitative Research: What Constitutes Persuasive Writing? Organizational Research Methods, 21(1), 30– 67. https://doi.org/10.1177/1094428117706533
- Karami, A., White, C. N., Ford, K., Swan, S., & Spinel, M. Y. (2020). Unwanted advances in higher education: Uncovering sexual harassment experiences in academia with text mining. *Information Processing & Management*, 57(2), 102167.
- Keevy, I. (2008). African philosophical values and constitutionalism: A feminist perspective on Ubuntu as a constitutional value (Doctoral dissertation, University of the Free State).
- Khilji, S. E. (2021). Lived experiences of inequalities in the USA: a sense-making perspective. *Equality, Diversity and Inclusion: An International Journal*.
- Kumar, S. (2018). Analysis in a Business Research. *Journal of General Management* Research, 5(2), 70–82.
- Kumar, S., Kailasapathy, P., & Mudiyanselage, A. S. (2021). It's my luck: impostor fears, the context, gender and achievement-related traits. *Personnel Review*.
- Kuna, S. (2019). All by myself? Executives' impostor phenomenon and loneliness as catalysts for executive coaching with management consultants. *The Journal of Applied Behavioral Science*, *55*(3), 306-326.
- Ladonna, K. A., Ginsburg, S., & Watling, C. (2018). "Rising to the Level of Your Incompetence": What Physicians' Self-Assessment of Their Performance Reveals about the Imposter Syndrome in Medicine. *Academic Medicine*, 93(5), 763–768. https://doi.org/10.1097/ACM.00000000002046
- LeBaron, C., Jarzabkowski, P., Pratt, M. G., & Fetzer, G. (2018). An Introduction to Video Methods in Organizational Research. Organizational Research Methods,

21(2), 239-260. https://doi.org/10.1177/1094428117745649

- Levant, B., Villwock, J. A., & Manzardo, A. M. (2020). Impostorism in third-year medical students: an item analysis using the Clance impostor phenomenon scale. *Perspectives on medical education*, *9*(2), 83-91.
- Lewis, C. (2021). SA's ICT sector urgently needs a backbone. Retrieved from https://www.businesslive.co.za/bd/opinion/2021-07-06-sas-ict-sector-urgentlyneeds-a-backbone/
- Mainali, S. (2020). Being an Imposter: Growing Out of Impostership. JNMA: Journal of the Nepal Medical Association, 58(232), 1097.
- Maji, S. (2021). "They Overestimate Me All the Time:" Exploring Imposter Phenomenon among Indian Female Software Engineers. *Metamorphosis*, *20*(2), 55-64.
- Marshman, E. M., Kalender, Z. Y., Nokes-Malach, T., Schunn, C., & Singh, C. (2018). Female students with A's have similar physics self-efficacy as male students with C's in introductory courses: A cause for alarm?. *Physical review physics education research*, *14*(2), 020123.
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum Qualitative Sozialforschung*, *11*(3). https://doi.org/10.17169/fqs-11.3.1428
- Matotoka, M. D., & Odeku, K. O. (2021). Mainstreaming black women into managerial positions in the South African Corporate Sector in the era of the Fourth Industrial Revolution (4IR). *Potchefstroom Electronic Law Journal* (*PELJ*), 24(1), 1-35.
- Medline, A., Grissom, H., Guissé, N. F., Kravets, V., Hobson, S., Samora, J. B., & Schenker, M. (2022). From self-efficacy to imposter syndrome: The intrapersonal traits of surgeons. *JAAOS Global Research & Reviews*, 6(4), e22.
- Mehta, R., Rice, S., Li, T., Cooke, S., Lange, R., Black, M., Smith, C., Milner, M., Winter, S. R., Ragbir, N., & Austin, V. (2020). What type of collegiate pilot is likely to experience imposter phenomenon? *Journal of Aviation/Aerospace Education & Research, 29*(3), 37-67. https://doi.org/10.15394/jaaer.2020.1857

- Melhem, S., Morrell, C., & Tandon, N. (2009). Information and communication technologies for women's socioeconomic empowerment.
- Morton, T. R., Gee, D. S., & Woodson, A. N. (2019). Being vs. becoming: Transcending STEM identity development through Afropessimism, moving toward a Black X consciousness in STEM. *The Journal of Negro Education*, 88(3), 327-342.
- Morton, T. R., & Parsons, E. C. (2018). # BlackGirlMagic: The identity conceptualization of Black women in undergraduate STEM education. *Science Education*, 102(6), 1363-1393.
- Mudau, T. J., & Obadire, O. S. (2017). The role of patriarchy in family settings and its implications to girls and women in South Africa. *Journal of Human Ecology*, 58(1-2), 67-72.
- Mullangi, S., & Jagsi, R. (2019). Imposter syndrome: treat the cause, not the symptom. *Jama*, *322*(5), 403-404.
- Nadal, K. L., King, R., Sissoko, D. G., Floyd, N., & Hines, D. (2021). The legacies of systemic and internalized oppression: Experiences of microaggressions, imposter phenomenon, and stereotype threat on historically marginalized groups. *New Ideas in Psychology*, 63, 100895.
- Neureiter, M., & Traut-Mattausch, E. (2016). An inner barrier to career development: Preconditions of the impostor phenomenon and consequences for career development. *Frontiers in psychology*, *7*, 48.
- Neureiter, M., & Traut-Mattausch, E. (2017). Two sides of the career resources coin: Career adaptability resources and the impostor phenomenon. *Journal of Vocational Behavior*, *98*, 56–69. https://doi.org/10.1016/j.jvb.2016.10.002
- Noamene, T. B., PhD., Halcro, K., PhD., Chaher, D., PhD., & Talib, A., PhD. (2021).
   Female directors and firm financial performance: The case of the FTSE 100. Organization Development Journal, 39(1), 59-76.
   https://www.proquest.com/scholarly-journals/female-directors-firm-financial-performance-case/docview/2536822629/se-2
- Nwaichi, E. O. (2021). Science by Women: Stories From Careers in STEM. Springer Nature.

- Ojebode, A., Ojebuyi, B. R., Oladapo, O. A., & Oyedele, O. J. (2018). Mono-Method Research Approach and Scholar–Policy Disengagement in Nigerian Communication Research. *In The Palgrave Handbook of Media and Communication Research in Africa (Pp. 369-383), Palgrave Macmillan, Cham.*
- Pannhausen, S., Klug, K., & Rohrmann, S. (2020). Never good enough: The relation between the impostor phenomenon and multidimensional perfectionism. *Current Psychology*, 1-14.
- Pietilä, A. M., Nurmi, S. M., Halkoaho, A., & Kyngäs, H. (2020). Qualitative research: Ethical considerations. In *The application of content analysis in nursing science research* (pp. 49-69). Springer, Cham.
- Powell, C., & Chang, A. M. (2016). Women in tech as a driver for growth in emerging economies. *Council on Foreign Relations*.
- PwC (2022). Women in boardroom. https://www.pwc.co.za/en/press-room/womenin-boardroom.html
- Rasmussen, P., Henderson, A., Andrew, N., & Conroy, T. (2018). Factors influencing registered nurses' perceptions of their professional identity: An integrative literature review. *The Journal of Continuing Education in Nursing*, 49(5), 225-232.
- Republic of South Africa Ministry Communications and Digital Technologies. (2020). Low retention rate of women in the IT industry in South Africa: The leaky pipeline report. https://www.dcdt.gov.za/images/DM-Speeches/DM\_MEDIADM\_DCDT\_Keynote\_Leaky\_Pipes\_Report\_20.08.2020. pdf
- Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, *25*(4), 14–20. https://doi.org/10.7748/nr.2018.e1466
- Sarstedt, M., Bengart, P., Shaltoni, A. M., & Lehmann, S. (2018). The use of sampling methods in advertising research: a gap between theory and practice. *International Journal of Advertising*, 37(4), 650–663. https://doi.org/10.1080/02650487.2017.1348329
- Saunders, M., & Lewis, P. (2018). *Doing Research in Business and Management* (2nd ed.). Pearson.

- Schubert, N., & Bowker, A. (2019). Examining the impostor phenomenon in relation to self-esteem level and self-esteem instability. *Current Psychology*, 38(3), 749-755.
- Slank, S. (2019). Rethinking the imposter phenomenon. *Ethical Theory and Moral Practice*, 22(1), 205-218.
- South African Government. (n.d.). Broad-based Black Economic Empowerment Act 53 of 2003. Retrieved from https://www.gov.za/sites/default/files/gcis\_document/201409/a53-030.pdf
- Statista (2022). South Africa: Total population from 2010 to 2020, by gender. Aaron O'Neill. https://www.statista.com/statistics/967928/total-population-of-southafrica-bygender/#:~:text=This%20statistic%20shows%20the%20total,to%20approximat ely%2029.22%20million%20inhabitants.
- StatSA. (2017). Three facts about the ICT sector. Retrived from https://www.statssa.gov.za/?p=9852
- Stichter, S. B., & Parpart, J. (2019). *Patriarchy and class: African women in the home and the workforce*. Routledge.
- Tandon, N., Pritchard, S., Savelieva, V., Smith, R. G., & Vogt, E. (2012). A bright future in ICT opportunities for a new generation of women. *Geneva, Switzerland: International Telecommunication Union.*
- Theofanidis, D., & Fountouki, A. (2018). Limitations and delimitations in the research process. *Perioperative Nursing-Quarterly scientific, online official journal of GORNA, 7*(3 September-December 2018), 155-163.
- The World bank. (n.d.). Population, female (% of total population). Retrieved from https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS
- The World Bank Group. (2018). South Africa Digital Economy Assessment. South Africa Digital Economy Assessment. https://doi.org/10.1596/33632
- Thomas, R., Cooper, M., Urban, K., Cardazone, G., Bohrer, A., Mahajan, S., Yee, L., Krivkovich, A., Huang, J., Rambachan, I., & Burns, T. (2021). *Women in the*



Workplace.

https://womenintheworkplace.com/Women\_in\_the\_Workplace\_2017.pdf

- Tiefenthaler, I. (2018). Conquering imposter syndrome. University of Montana Journal of Early Childhood Scholarship and Innovative Practice, 2(1), 4.
- Tulshyan, R., & Burey, J. A. (2021). Stop telling women they have imposter syndrome. *Harvard Business Review*, *31*.
- Turner, J. C., & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology*, 25(3), 237-252.
- Vivek, R., & Nanthagopan, Y. (2021). Review and Comparison of Multi-Method and Mixed Method Application in Research Studies. *European Journal of Management Issues*, 29(4), 200–208. https://doi.org/10.15421/192119
- Wang, K. T., Sheveleva, M. S., & Permyakova, T. M. (2019). Imposter syndrome among Russian students: The link between perfectionism and psychological distress. *Personality and Individual Differences*, *143*(September 2018), 1–6. https://doi.org/10.1016/j.paid.2019.02.005
- Wester, K. L., Vaishnav, S., Morris, C. W., Austin, J. L., Haugen, J. S., Delgado, H.,
  & Umstead, L. K. (2020). Interaction of imposter phenomenon and research selfefficacy on scholarly productivity. *Counselor Education and Supervision*, 59(4), 316-325.
- Woiceshyn, J., & Daellenbach, U. (2018). Evaluating inductive vs deductive research in management studies. *Qualitative Research in Organizations and Management: An International Journal*, 13(2), 183–195. https://doi.org/10.1108/qrom-06-2017-1538
- Xu, W., & Zammit, K. (2020). Applying Thematic Analysis to Education: A Hybrid Approach to Interpreting Data in Practitioner Research. *International Journal of Qualitative Methods*, 19, 1–9. https://doi.org/10.1177/1609406920918810



## APPENDIX (A) Research Instrument – Interview Guide

### Background

- 1) What is your role in the ICT sector?
- 2) What do you attribute your past achievements to and why?

## Internal drivers of Imposter syndrome

- When you have a task that you have to complete at work do you feel any of the following and why;
  - a. Anxious and or inadequate?
  - b. A need to complete the task perfectly without any error?
  - c. A need to be the best performer in relation to your colleagues?
- 2) What is your perception of failure?
- 3) How do you feel when people praise you?
- 4) Do you want to be successful in your career? Why?

### External drivers of imposter syndrome

- 1) Do you feel that your gender and racial group is adequately represented in positions of leadership in your organisation? Why?
  - Does the representation make the positions feel accessible to you? Why?
- 2) Have you experienced any bias in your current position and or career and did it make you question your capabilities?
  - a. If so, what type of bias and in what way?
- 3) Would you describe your organisational culture as any one of the following; competitive, high performance, fixed mentality and other? Please elaborate on other
  - a. How does the culture make you feel?
- 4) Do you feel like your viewpoints and contributions are adequately acknowledged in your organisation?
- 5) How has this impacted your perception of the quality of your contributions?

### Self-efficacy

1) How confident are you in your own abilities in the workplace? Why?

# APPENDIX (B) Code list

#### Codes

• A need to be the best is influenced by the need to prove one belongs

• Acquiring multiple skills results in success

 additional illegitimate criteria is forced on women when they need to progress in positions of leadership

• ageism and gender bias do not result in self doubt

• Ageism, racial bias and networking bias (who you know) results in one questioning their capabilities

• An environment that selectively acknowledges the contributions of women results in women being despondent/not contributing

• Anxiety and inadequacy is induced by doing a task for the first time or perceived lack of knowledge

• Anxiety and inadequacy is induced by lack of representation

• Anxiety and inadequacy, perfectionism, the need to be the best are experienced when completing a task

• Anxiety and inadequacy, perfectionism, the need to be the best are not experienced when completing a task

• anxiety induced by tasks one feels they are not proficient in

• Anxiety is induced by doing the task for the first time

• Anxiety leads to the need to outperform male counterparts

Anxious

• Aptitude and competency result in success

• Attributing praise to others

• Being an optimist results in success

• Being at the right time and the right place

• Being authentic results in success

 $\circ$  Being exposed to bias consistently makes one despondent

• Being exposed to gender and racial bias results in self doubt

• Being heard makes one feel that they need to prepare to share their views

• being in the minority, can make one feel like they go to work to prove a point

• Being in the minority (black female) influences feelings of imposter

• being service and delivery centred leads to success

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• Being the first female executive does not result in self doubt

• Being the only woman in a role can make one question their capabilities

 $\circ$  broad definition of success

• Business perceives failure as a stumbling block, this induces feelings of inadequacy

• Character, being driven and ambitious leads to success

• Clear career path makes one feel that positions of leadership are accessible

• Colleagues comments (this job is too bog), can lead to self doubt particularly during hard times.

• Competitive and high performance culture does not result in self doubt

• Competitive and high performance culture results in self doubt

• Competitive culture results in individuals questioning their abilities

• Competitive, high performance and fixed mentality culture do not impact ones perception of their capabilities

• Confidence can mitigate feelings of inadequacy

• Confidence in abilities is attributable to knowledge one has

• Confidence in ones abilities does not reduce imposter syndrome where one is doing tasks for the first time

• Confidence in ones abilities was influenced by experience (having succeeded in a specific role)

Confident in abilities

• Consistent urgency of deliverables causes anxiety

• Dedication results in success

• Deflection of praise is a characteristic of imposter syndrome

• Desire success

• Different definition of success

• Dismantling perfectionism, encourages a failing fast attitude

• Disparaging comments (You are not leadership material) results in self doubt

• Does not fear failure

• Drive/ambition leads to success

• eagerness results in success

• Education is the key to success

• Experience anxiety when completing a task

• Experiencing ageism does not impact ones perception of their capabilities

• Experiencing gender and maternal bias does not make one question their capabilities

• Experiencing maternal bias can make one want to pursue growth at other organisations

- Externally induced anxiety
- Failure does not induce feelings of imposterism.
- Failure induces feelings of inadequacy
- Failure is perceived as a learning
- Failure is perceived as hell on earth
- Family support results in success
- Feeling anxious or inadequate
- Feeling heard increases confidence in ones quality of contributions
- $\circ$  Finds own praise more impactful then external praise
- Fixed and competitive culture do not result in self doubt
- Fixed mentality culture makes one question their abilities
- Fixed mentality do not result in self doubt
- Fixed mentality makes individuals despondent (What is the point)
- Fluctuating confidence levels in abilities
- Gender and age bias do not negatively influence ones perception of their capabilities
- Gender bias does not result in feelings of imposterism
- Gender bias results in feelings of self doubt
- Gender, racial and age bias do not result in self doubt
- Gender, racial and age bias do result in self doubt
- God's grace, placing you in the right places at the right time results in success
- Great networks lead to success
- Hard work and dedication result in success
- Hard work results in success
- Has a vision board for their career, to be in c-suite
- $\circ$  Has not experienced bias
- Having supporters leads to success
- health high performance environments do not induce feelings of self doubt
- High performance culture does not result in self doubt
- High performance culture results in self doubt

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- Imposter syndrome does not impact the desire to be successful
- In environments with no diversity, women feel they experience glass ceiling
- individual feels anxious and wants to perform tasks perfectly

• Individuals feel anxious because of perfectionism

- Individuals lack of experience may make them question their contributions
- individuals making you feel like you are not enough
- industry induced perfectionism

• Influential people believing in you and opening doors for you results in success

• Kumbaya/human centred culture influences feelings of self doubt

• Lack of confidence in abilities when its a big customer/task/request from senior person

• Lack of confidence when transitioning into a new role

• Lack of gender and racial representation in leadership positions does not impact perception of accessibility of positions

• Lack of representation results in perception that leadership positions are inaccessible

• Lack of representation can limit opportunities to black women

• Lack of representation creates the need to be the best

• lack of representation does not impact ones perception of the accessibility of leadership positions, its mentorship that matters

• Lack of representation makes positions of leadership seem inaccessible

• lack of representation makes women feel like they have to leave in order to progress

• Lack of representation, does negatively impact women's aspirations to be in leadership roles

• lack of representation makes some roles difficult to attain

• Lack of representation makes women feel that they need to leave an organisation in order to progress

• Lower management level, experienced a need to be the best and is a characteristic of imposter syndrome

 making contributions outside ones scope may make them question their contributions

• Maternal bias does no make one question their capabilities

 $\circ$  Measuring individual value based on external validation

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Mentors that support you and open doors for you

Middle management

Mostly white male represented in leadership

 Not being accepted in an environment makes you question if you deserve to be there

Not believing in ones achievements is a characteristic of imposter syndrome

Not taking thigs personally leads to success

Openness to learn and knowledge acquired results in success

Passion leads to success

• People's negative perception of ones capabilities (e.g. you are not ready) induce

feelings of imposter syndrome

• Perceiving failure as a learning, makes failure more acceptable

perfectionism and the need to be the best are experienced

perfectionism driven by the need to avoid consequences

Perfectionism is a trait of Imposter syndrome

Perseverance results in success

• Praise is accepted when they feel it is well deserved rather than for standard behaviour

• praise feels like its unwarranted

• Praise is internalised

Praise is validating and mitigate feelings of imposter syndrome

Proving yourself to others results in success

questions the genuineness of others praise

racial bias does not result in self doubt

Receiving a request from senior management may make one doubt their abilities

representation makes leadership positions seem attainable and inspire career

ambition

Resilience results in success

self praise when praise is not received

Senior Management

shadowing made being in positions of leadership appealing

Sponsorship makes positions of leadership accessible to black women

struggles with accepting praise

o success is debatable

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- Success is defined as work life balance
- Succession plans make feelings of leadership seem accessible
- $\circ$  Success is defined as a successful leader

• Support bolsters confidence

• Systematic structures that shut black women out of leadership

• Taking initiative leads to success

• Taking on challenges results in success

 $\circ$  The need for affirmation

• The need to be the best is experienced

• Toxic high performance culture increases feelings of inadequacy

• very confident in specialist abilities

• very confident in their own abilities

• When failure is not accepted by superiors, it induces feelings of imposter syndrome

• When ones contributions are questioned it influences feeling of self doubt and questioning ones worth

• when younger gender and racial bias resulted in self doubt

• When people vocalise the doubt they have in your capabilities it results in self doubt

• Where individual's contributions are not heard it makes them question the value that they bring

• Where one does not feel heard it does not result in self doubt

• where one had to fight for their contributions to be heard, self doubt was experienced

• Where one has to fight for their contributions to be heard, they felt they had to have their facts in order before contributing

• Where ones contributions are ignored/they do not feel heard, it negatively impacts how they view their capabilities

 $\circ$  You need to prove that you are not just a BEE candidate but can deliver