The effect of the hybrid electronic-work experience on creativity in South Africa:
The moderating role of inclusive leadership

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ABSTRACT

The COVID-19 pandemic has brought about a significant shift from traditional, physical workplaces to hybrid work environments. This has increased the current need for creativity and disrupted the way organisations operate, forcing them to re-evaluate and adapt their traditional operations. As leaders navigate this shift, they face designing hybrid work methods that lack established precedents, leading to significant difficulties, particularly in applying behaviours that yield optimal outcomes needed for the twenty-first century, such as creativity. The purpose of this research was to investigate the relationship between the hybrid work experience and creativity, and to examine the moderating role of inclusive leadership in the relationship.

Being cross-sectional, this research followed a mono-method quantitative, deductive, descriptive approach and was conducted using questionnaires found in existing literature. The data for this research was collected from 268 respondents, over a period of four weeks, using a non-probability, purposive sampling method. Through a hierarchical regression analysis, the results show that flexibility and productivity are important to foster creativity in a hybrid work environment. When inclusive leadership behaviours are exerted, no significant moderating effects were found. Lastly, the research provides future recommendations for theory and practice to navigate the new dynamic work landscape.

KEYWORDS

COVID-19, creativity, remote work, hybrid work, leadership, inclusive leadership, knowledge workers

PLAGIARISM 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.

Mileshaa Andi
01 November 2023

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LIST OF ACRONYMS

RW	Remote work
HW	Hybrid work
VW	Virtual work
IL	Inclusive Leadership
E-WL	Electronic-work life
E-work	Electronic-work

CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

Applying Charles Darwin's adage: "It is not the strongest of the species that survives, nor the most intelligent; it is the one most responsive to change" served as the guiding principle for this research, which explored the dynamics of the hybrid work experience and creativity, while examining the role of inclusive leadership. As well as contributing to theory, the purpose of the study was to equip organisations to successfully confront the ceaseless challenges brought about by the COVID-19 pandemic and pave the way for future organisational success.

Figure 1.1 provides an overview of the chapter, providing a visual of its structure and content.
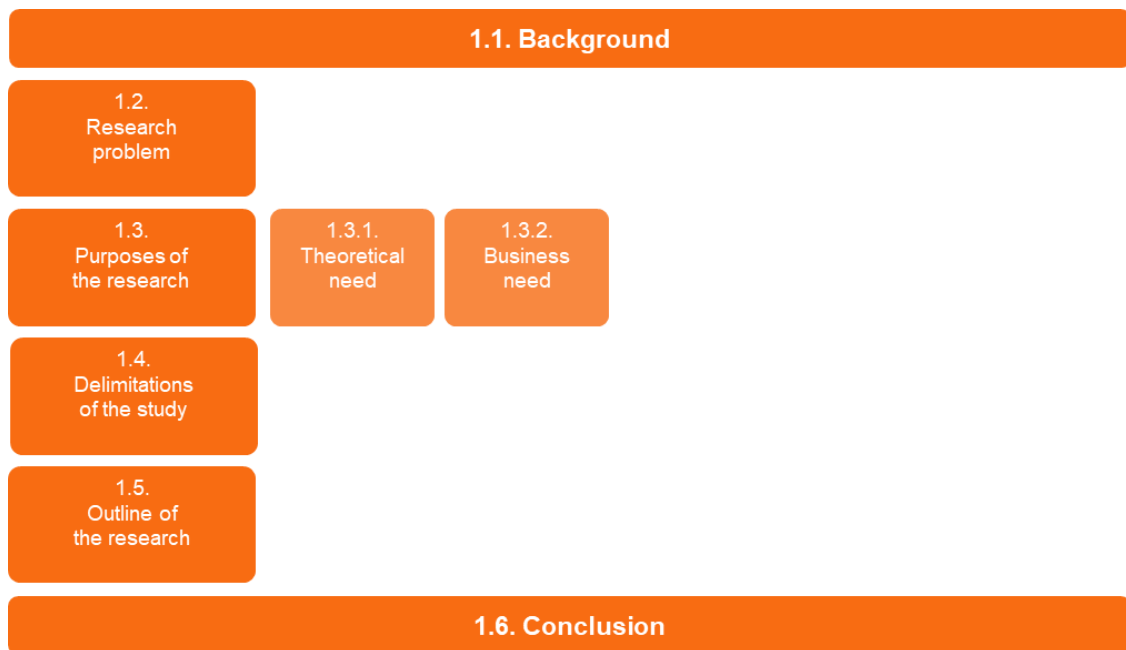
Figure 1.1: Chapter 1 - Introduction to the research problem
Source: Researcher's representation

1.1.   Background

Organisational growth, survival and success is heavily reliant on creativity (Anderson et al., 2014; Lee et al., 2020). Therefore, creativity is regarded as a quality that is critical for navigating organisational environments and ensuring organisational survival in the twenty-first century. The ability to think creatively is one of the vital

skills is needed in organisations in current economic and social contexts, as distinct from the skills that were required during the past century (Van Laar et al., 2017, 2020; World Economic Forum, 2020). Van Laar et al. (2017) emphasises the imperative for organisations to stay competitive in the current economy by noting the need of skilled knowledge workers that are creative, as they make up the majority of the workforce. Fostering creativity therefore has significant implications for organisations seeking to survive in the current era and succeed in the future.

The recent COVID-19 pandemic has added a complicating factor, increasing the current need for creativity, as it has disrupted the way organisations operate, forcing them to re-evaluate and adapt their traditional operating practices (Lozano & Barreiro-Gen, 2021). To stop the virus from spreading and in response to the international lockdowns caused by the pandemic, organisations opted for remote work, in the form of work-from-home policies, in order to continue operating (Chamakiotis et al., 2021). This caused organisations to face "one of the most significant shifts in current workplace dynamics" (Chamakiotis et al., 2021; Davison, 2020; Raghuram et al., 2019; Saad & Agogué, 2023).

Lozano & Barreiro-Gen (2021) assert that such disruptions, particularly the pandemic, pose a significant threat to the survival of organisations, which struggle to balance internal decisions based on external events. For this reason, during this post-pandemic period, organisations should adopt a more humanist approach; this will enable them to take advantage of the disruption while remaining in harmony with technological and managerial approaches that align with the 'new normal'. It will allow them to respond better to external events and navigate through new environments, thus determining their long-term viability.

1.2. Research problem

Scholars have reported a serious drawback to remote work: working in isolation, using technology, does not promote creativity (Gashi et al., 2022; Grant & Russel, 2020). Gratton (2020) notes that the challenges posed by COVID-19 and the evolving post-pandemic landscape have prompted leaders to actively explore new work approaches. Moreover, organisations are confronted with unprecedented challenges

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and uncertainties that pose a threat to their survival (Anderson et al., 2014; Hughes et al., 2018; Lee et al., 2020). Gratton (2020) concludes that this paradigm shift, exacerbated by COVID-19, necessitates a comprehensive reconfiguration of workplace dynamics, encompassing leadership practices, physical location, and time-based aspects. As leaders navigate this transformative process, they face the intricate task of designing hybrid working methods that lack established precedents, leading to significant difficulties and confusion, especially in applying qualities that yield optimal outcomes, such as creativity (Gratton, 2020).

Creativity thrives in social settings, whereas remote work has been found to restrain knowledge sharing. Consequently, remote work is unable to promote organisational survival (Gashi et al., 2022; Grant & Russel, 2020). On the other hand, a successful remote work environment is said to enable autonomy (Iazzolino et al., 2017; Shujahat et al., 2019), better mood and emotion (Fonner & Roloff, 2010), motivation (Costa et al., 2023) and increased knowledge through organisational trust, flexibility, a healthy work-life balance and work productivity (Charalampous et al., 2022). Individually, these factors can foster creativity (Amabile, 1996a).

Creative thinking is therefore a crucial tool for ensuring the success of an organisation in the face of adversity, and for ensuring that it remains competitive. Jia et al. (2022) emphasise the significance of enhancing creativity within organisations in emerging economies. Leadership behaviours that are inclusive are particularly important for organisational success within countries of high cultural diversity, such as South Africa. Korkmaz et al. (2022) note that inclusive leadership gives employees a sense of being "at home" while working. This makes it especially appropriate in contexts of hybrid work, where employees actually find themselves in their homes. Korkmaz et al. (2022) also indicate that inclusive leadership increases a sense of belonging, a feeling that organisations sought to enhance during the COVID pandemic, when increased numbers of employees began working remotely. Giving followers a sense of belonging is central to inclusive leadership.

Inclusive leadership is an approach that is distinctly different from other leadership styles: it has been found to provide autonomy, resources, support, information and time for encouraging innovative work behaviours that inherently encompass

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creativity. These coincide with the main dimensions of inclusive leadership, namely openness, availability and accessibility (Bataineh et al., 2022; Sürücü et al., 2023). Korkmaz et al. (2022) indicate that future research should investigate whether work-from-home arrangements and the COVID-19 crisis require inclusive leaders to alter their approach to suit these circumstances.

To contribute practical and theoretical recommendations that aid the ever-evolving landscape of leadership and organisational contexts, it is therefore important to highlight the limited attention given to hybrid work in the midst of the widespread adoption of remote work. The research gap lies in gaining a deeper understanding through the examination of the relationship between dispersed employees and creativity, as well as examining the leadership behaviours needed to foster creativity in the hybrid work environments brought about by the COVID-19 pandemic (Chamakiotis et al., 2021).

1.3.   Purposes of the research

Moldoveanu and Narayandas (2019) argue that the current business landscape, characterised by volatility, uncertainty, complexity and ambiguity, demands unprecedented levels of leadership development. Organisational survival and success now hinge on effective leadership that goes beyond past achievements and addresses present challenges. Gratton (2021) emphasises the need for a shift in mindset so that leaders can successfully navigate the transition. It has become crucial to design hybrid work models that prioritise individual needs and enable optimal performance. As organisations emerge from the pandemic, there is a growing focus on flexible work arrangements and reimagining the purposes of physical workplaces. By investing in tools, resources and employees themselves, leaders have the ability to empower employees to work effectively from home, thus fostering creativity. Therefore, as hybrid work emerges as the potentially permanent future of work, it becomes imperative to develop an understanding of leadership behaviours that are tailored to specific organisational needs, in order to effectively navigate and lead in these environments (Gratton, 2021).

To ensure a successful transition and enhance the effectiveness of leaders as they shift from traditional, physically co-located teams to hybrid work environments, it is essential to acquire a comprehensive understanding of how leadership, particularly inclusive leadership, can be applied in this context. Gong et al. (2021) note that inclusive leadership involves accepting, accommodating and adapting to new environments while turning risks into opportunities. Furthermore, Gong et al. (2021) and Hirst et al. (2009) concur that inclusive leaders in the presence of new, volatile, and uncertain environments are able to integrate people more effectively. This attribute is important in fostering creative behaviour among followers, and leads to organisational success (Hirst et al., 2009). Saad and Agogué (2023) note that, in order to successfully foster creativity in virtual teams, leaders should ensure cohesiveness amongst members while embracing diversity, different viewpoints and inclusivity. Shore et al. (2018) emphasise that embracing differences is a fundamental aspect of inclusive leadership. Consequently, there is an overlap between the behaviours of inclusive leadership and the success of virtual teams.

By examining the role of inclusive leadership, this research not only contributes to the advancement of leadership theory, but also contributes to the development of practical recommendations for supporting leaders and fostering creativity within the ever-evolving landscape of work (Bohl, 2019). By comprehending the intricacies of leadership and creativity in the context of hybrid work, organisations can effectively navigate this dynamic environment and achieve optimal outcomes.

Over the past two decades, there has been a significant increase in interest regarding remote work, often termed virtual work or electronic work (e-work) (Chamakiotis et al., 2021; Raghuram et al., 2019). Scholars such as Chamakiotis et al. (2021), Raghuram et al. (2019), and Saad and Agogué (2023) have contributed to the extensive body of research dedicated to remote work. However, limited attention has been paid to remote work occasioned by the COVID-19 pandemic, which combines remote work and face-to-face interactions, commonly referred to as hybrid work (Chamakiotis et al., 2021; Gratton, 2020, 2021).

This poses the question: if creativity is needed for the future success of organisations, and hybrid work is here to stay, how can we better understand the

environment, leadership approaches and knowledge workers in order to foster creativity? By examining this, organisations may gain insight into overcoming current challenges related to hybrid work (Chamakiotis et al., 2021; Davison, 2020; Raghuram et al., 2019; Saad & Agogué, 2023) and align with the evolving demands of the twenty-first century (Van Laar et al., 2017, 2020). This, in turn, will benefit both current and future leaders by enabling them to effect policy changes, embrace new ways of working and identify which leadership behaviours to practise in order to foster creativity for organisational success (Feitosa & Salas, 2021; Hughes et al., 2018).

Essentially, the effects of the hybrid work experience are measured by using the construct of electronic-work life, which encompasses four dimensions: organisational trust, flexibility, work-life interference and productivity, for an effective hybrid/remote work environment (Charalampous et al., 2023). In this research, the dependent variable was creativity, and the moderating role of inclusive leadership in the relationship between these constructs was evaluated. Taking into consideration the background (section 1.1.) and the research problem discussed in section 1.2, the purpose of this research was twofold: (1) to investigate the effects of the hybrid work experience on creativity and (2) to examine the role of inclusive leadership in moderating the relationship between the effects of the hybrid work experience and creativity.

1.3.1. Theoretical need

The theoretical need for this research lies in the expansion of organisational research. Scholars have dedicated significant attention to understanding the factors that contribute to creativity in the workplace. Therefore, the focus in organisational research aims to develop theoretical models and evidence-based guidance to foster creativity within organisations and recognise the transformative power it holds (Lee et al., 2020; Zhou & Hoever, 2014). Among the myriad factors that influence creativity for organisational effectiveness, leadership emerges as a pivotal antecedent. Leaders occupy a central position in shaping the working environment, distributing resources, defining tasks, and exerting influence over employee behaviour (Fischer, et al., 2017; Lee et al., 2020; Liden et al., 1997). Similarly, Hughes et al. (2018), note that the contextual factors that shape the effectiveness of leadership in fostering

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creativity are essential for developing tailored and contextually relevant strategies to contribute to organisational research, as well as practically advance business.

The topics of leadership and creativity have been the subject of extensive research (Hughes et al., 2018; Lee et al., 2020). However, it is worth noting that, historically, this relationship has not received adequate attention. It is often discussed in descriptive terms, providing summarised research findings, or acknowledged as an area requiring further investigation (Hughes et al., 2018). The complexity arising from studying multiple intercorrelated variables associated with different leadership approaches has posed challenges in offering practical, contextual, evidence-based recommendations (Derue et al., 2011; Lee et al., 2020; Hughes et al., 2018). Consequently, the literature on this topic has become complex and fragmented, impeding a comprehensive grasp of the topic (Lee et al., 2020).

According to Lee et al. (2020), previous meta-analytical research regarding leadership has not often included creativity as an outcome or has merged creativity and innovation into a single variable. This partly accounts for the reason why creativity research is still minimal. The same author did not discuss inclusive leadership as an important leadership variable for creativity, thereby indicating the lack of inclusive leadership research and creativity. Furthermore, Han et al. (2017) and Saad and Agogué (2023) observe that research regarding creativity in virtual teams is still in its nascent stage, thereby raising the argument that creativity in a hybrid setting is nearly non-existent.

1.3.2. Business need

Within the work environment, Hughes et al. (2018), note that leadership stands as the primary factor that influences employee creative behaviour. Furthermore, Megheirkouni and Mejheirkouni (2020) note that the challenges stemming from the environmental context have far-reaching implications for the future of leadership and organisational effectiveness. The increasing prevalence of remote work, especially hybrid models that combine traditional physical co-location with virtual work, presents leaders and organisations with unique challenges that require enhanced creativity (Chamakiotis et al., 2021). Similarly, Megheirkouni and Mejheirkouni (2020) and

Northouse (2018) emphasise the importance of identifying unique leadership needs within an organisational environment as a guiding principle for developing leadership competencies. This underscores the significance of tailoring future leadership advancements to the new environmental contexts of organisations.

According to Northouse (2021), the relationship between leader behaviours and leadership outcomes is not necessarily linear. Recent advancements in the field highlight a curvilinear relationship, suggesting that optimal leadership qualities may vary depending on specific circumstances and contexts, such as hybrid work environments. Organisations can gain deeper insights into the competencies and attributes that drive effective leadership by considering contextual factors and embracing an evolving understanding of leadership behaviours. This knowledge can inform targeted leadership development initiatives, contribute to leadership effectiveness and ultimately aid in organisational survival through fostering creativity.

Due to this, there is a dire need to foster creativity (Saad & Agogué, 2023) and a need to alter current leadership approaches (Feitosa & Salas, 2021) as traditional ways of operating and conducting an organisation are no longer sufficient (Anderson et al., 2014; Hughes et al., 2018; Lee et al., 2020).

1.4. Delimitations of the study

The delimitations of this study include the following:

- Innovation and creativity are often merged into a single construct yet are two different constructs. Drawing on the recommendations of various scholars, this research therefore adopted the specific definition of creativity and did not merge them into a single construct (this is discussed in Chapter 2: Literature review, section 2.3) (Lee et al., 2020).
- This research assumes that hybrid work is a part of remote work and anchors this study exclusively in the combination of computer-mediated and face-to-face communication, which is hybrid work (Chamakiotis et al., 2021; Saad & Agogué, 2023).
- Given that this research examined personal perceptions, it adopts an individual-level approach and did not take the perceptions on a team or organisational

level into consideration.

- This study only reviewed the hybrid work environment through the lens of electronic work life, focusing solely on four elements: organisational trust, flexibility, work-life interference and productivity (Charalampous et al., 2023).
- This study took place exclusively in South Africa, and does not necessarily apply in other locations..

1.5. Outline of the research

Chapter 1: Introduction to the research problem

Chapter 2: Literature review	2.1. Introduction - 2.2. Conceptual model - 2.3. Creativity - 2.4. The hybrid work life experience - 2.5. Hybrid work as an extension of remote work - 2.6. Electronic-Work Life (E-WL) – 2.7. E-WL and creativity - 2.8. Leadership - 2.9. Inclusive leadership – 2.10. Moderation studies – 2.11. Conclusion
Chapter 3: Research questions	3.1. Introduction - 3.2. Research questions – 3.3. Conclusion
Chapter 4: Research methodology	4.1. Introduction - 4.2. Research design – 4.3. Data collection strategy – 4.4. Measurement instrument – 4.5. Pilot testing – 4.6. Data gathering process – 4.7. Data cleaning, editing and coding – 4.8. Approach to data analysis – 4.9. Quality assurance – 4.10. Data analysis – 4.11. Security – 4.12. Limitations
Chapter 5: Results	5.1. Introduction - 5.2. Descriptive statistics of the sample – 5.3. Validity testing – 5.4. Reliability testing – 5.5. Normality testing – 5.6. Correlation analysis – 5.7. Research hypotheses – 5.8. Conclusion
Chapter 6: Discussion of results	6.1. Introduction – 6.2. Descriptive statistics of the sample – 6.3. Descriptive characteristics of the constructs – 6.4. Hypothesis one – 6.5. Hypothesis two – 6.6. Conclusion
Chapter 7: Conclusion	7.1. Introduction – 7.2. Principle findings – 7.3. Research limitations – 7.4. Recommendations to business – 7.5. Suggestions for future research – 7.6. Conclusion

References and appendices

Figure 1.2: Outline of the research

Source: Researcher's representation

1.6. Conclusion

This chapter highlighted the background, research problem and research purpose, as well as the theoretical and business needs that it serves. The research gap that emerged from the existing theory was the need to examine the relationship between

dispersed employees and their levels of creativity, as well as the leadership behaviours identified as essential for nurturing creativity in the hybrid work environment brought about by the COVID-19 pandemic. Inclusive leadership, in particular, is currently considered to be the most suitable leadership style for remote work, as well as for navigating the unprecedented circumstances of the twenty-first century.

CHAPTER 2: LITERATURE REVIEW

2.1.   Introduction

The following chapter aimed to unpack the key constructs in the form of a literature review. Namely, creativity, the hybrid work environment (E-WL) and inclusive leadership. This chapter drew from existing literature to achieve testable hypotheses. Figure 2.1. is an overview of this chapter, followed by the conceptual model (Figure 2.2.).
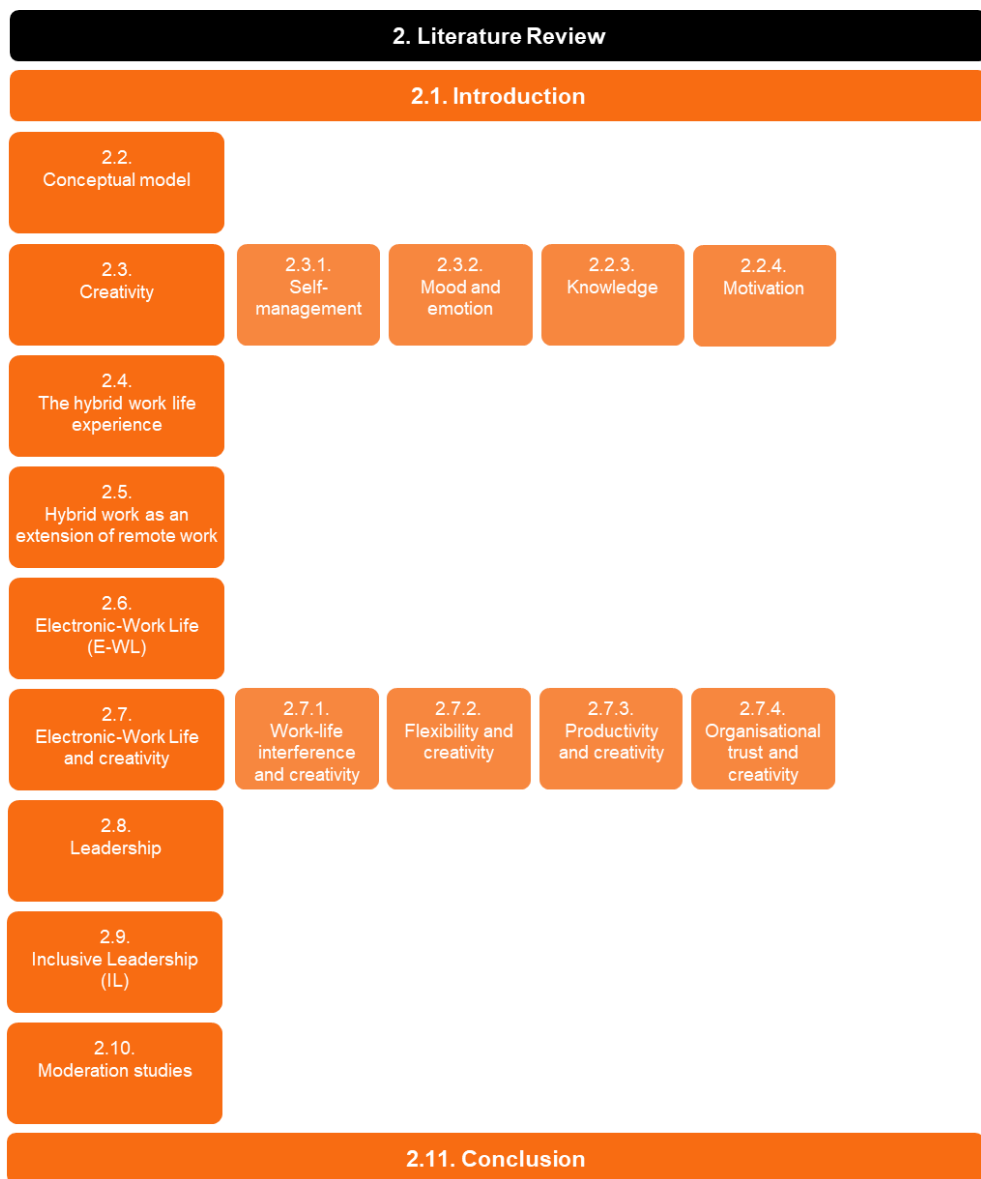
Figure 2.1: Chapter 2 - Literature Review

Source: Researcher's representation

2.2.   Conceptual model
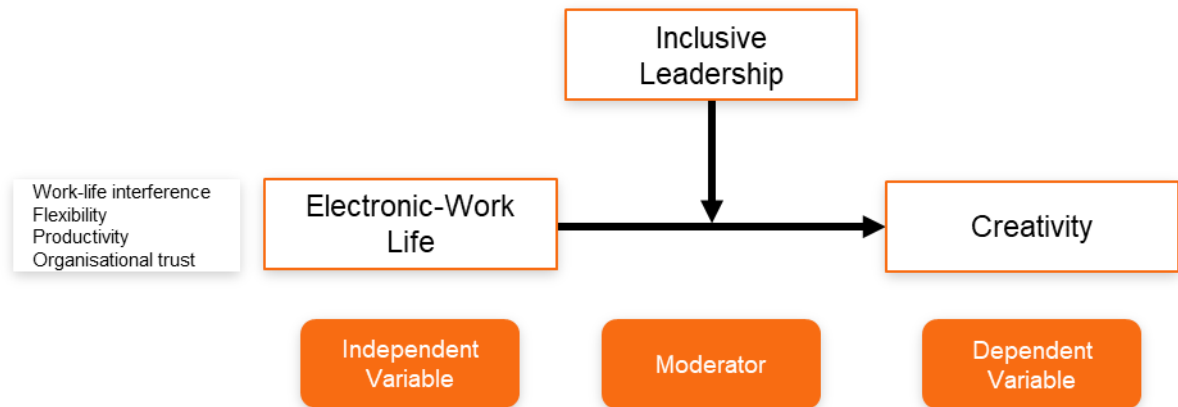
Figure 2.2: Conceptual model

Source: Researcher's representation of the conceptual model

The figure above depicts the relationship between electronic-work life and creativity, as well as the influence of inclusive leadership (IL) moderating this relationship.

2.3.   Creativity

Hughes et al. (2018) and Lee et al. (2020) note that creativity involves the cognitive and behavioural processes used by individuals to generate original ideas. However, there is sometimes confusion with the terms creativity and innovation as they are sometimes used interchangeably or considered as a single construct in research (Lee et al., 2020). Nevertheless, both Hughes et al. (2018) and Lee et al. (2020) emphasise that creativity and innovation are related but distinct constructs. Creativity is defined as the generation of novel and beneficial ideas in any environment (Amabile, 1996a; Zhou & George, 2001), accompanied by the view that all individuals possess the potential for creativity (Amabile, 1996a). On the other hand, innovation, as defined by Lee et al. (2020) and Amabile (1996a), focus on the processes involved in implementing new ideas within the organisational context and encompasses practical steps taken to translate creative ideas into tangible outcomes. Therefore, the difference lies in the formation of ideas in comparison to the implementation of ideas, in which creativity serves as a foundation and is the basis for innovation to happen (Amabile, 1996a; Koh et al., 2019). Noting that the success of organisations lies in their ability to innovate, creativity is of paramount importance as innovation cannot happen without creativity (Amabile, 1996a; Koh et al., 2019; Lee et al., 2020).

Stojcic et al. (2018) has a different view, and notes that creativity is so complex that it actually runs over the creative-innovation process as opposed to being just the initial part of the process. Nonetheless, this proves that creativity is vital for innovation to happen, and employees need to be creatively "fit" for a chance at organisational success and to perform ahead of competitors (Stojcic et al., 2018).

Nguyen et al. (2023) notes that the definition of "employee creativity" adopts the same concept as creativity and is defined as the process in which these novel and beneficial ideas concerning the organisation; including strategies and practices; are ultimately aimed at enhancing organisational effectiveness and competitiveness. Furthermore, Nguyen et al. (2023) claims that this definition of employee creativity is only rendered as part of an employee's job requirements and is displayed for employee accomplishment within the organisation. Nonetheless, (Amabile, 1996a) exerts that an individual's social environment exerts a significant influence on the level and frequency of creativity displayed in their roles.

Therefore, as the world transitions from previous virtual work to hybrid and agile practices (Charalampous et al., 2023), there is an evident impact that this has on creativity in organisations, teams and most specifically individuals (Chamakiotis et al., 2021). This makes sense as organisations are made up of individuals, and therefore individual creativity is the basis of creativity within an organisation (Blomberg et al., 2017). In noting so, in order to foster creativity, different levels of the organisation need to work together for creativity to occur. This is the reason, Anderson et al. (2014) and Stojcic et al. (2018) notes creativity to be a "multi-dimensional concept" that involves the organisation, team; including leaders; as well as the individual.

Individual creativity is driven by an individual's own initiative, motivation and environmental surroundings (Stojcic et al., 2018). It requires creative ability, expertise as well as a motivation to complete tasks and is made up of various factors including resources, organisational structure and culture, management, and personality (Alblooshi et al., 2021; Stojcic et al., 2018). Amabile (1996a) defines the meaning of personality in the context of creativity, as individual behaviours that lead to the formation of new ideas and not necessarily a strange/creative personality but

the behaviours that an individual exudes that leads to being creative. In noting so, there are four main themes that are prerequisites for individual creativity: (1) *self-management*; (2) *mood and emotion*; (3) *knowledge*; and (4) *motivation* (Blomberg et al., 2017). Similarly, tying in with these themes, Amabile (1996a) notes that the components that contribute to creativity are expertise, creative thinking and intrinsic task motivation.

2.3.1. Self-management

Blomberg et al. (2017) and Williams (2002) note that an individual's confidence in their own abilities, their self-awareness, their value, and their self-control are all linked to their individual creativity and the effect it has on their creative display and performance. Similarly, Yu et al. (2019) state that an employee's optimism, resilience, and self-efficacy all have an influence and contribute to creativity, and in turn to the creativity within an organisation. On the contrary, a low self-esteem and a lack of confidence has the ability to hinder individual creativity (Blomberg et al., 2017 & Williams, 2002). Therefore, self-management is key to exhibiting creative behaviour that leads to creative display and performance, and therefore it becomes imperative that there is a level of autonomy and responsibility so that one can practice self-management in order for creativity to occur (Axtell et al., 2000 & Blomberg et al., 2017).

2.3.2. Mood and emotion

Positivity and positive emotions are known to foster creativity among individuals, and in contrast a negative mood hinders creativity and therefore creates negative emotions (Amabile et al., 2005 & Blomberg et al., 2017). Creativity in itself is an act that requires emotional engagement and is where individuals interact with their culture and environment in order to be creative (Lebuda & Csikszentmihalyi, 2018; Walia, 2019). Therefore, Amabile et al. (2005) notes that creativity is prone to influence and becomes stimulated by an individual's interactions and surroundings. Thus, proving that interactions and environment has the ability to affect mood and emotion. On the other hand, authors argue that a bad mood can also stimulate creative behaviours, however, this effect can only be achieved when workload

pressure is low. Conversely, if workload pressure is high, a negative mood then becomes a barrier to creativity (Blomberg et al., 2017; Elsbach & Hargadon, 2006). Furthermore, Blomberg et al. (2017) posits that individuals are more attune to gain knowledge in aid of creativity when they are in a good mood, as it enhances their ability to retain information.

2.3.3. Knowledge

Curiosity and imagination are needed to foster creativity as they aid in seeking knowledge and combining resources to address current business challenges (Volery & Tarabashkina, 2021). Amabile (1996a) notes that knowledge is part of the foundation for creative work. Also known as expertise, knowledge on the problems of the specific individuals working domain is key to being creative (Amabile, 1996a). Similarly, in order for an individual to effectively apply their creativity and contribute to the success of business, it is imperative to have a seamless integration of knowledge, creative skill, and expertise, while also considering the perspectives of various business domains, such as marketing and finance to aid the organisation forward (Litchfield et al., 2015; Stojcic et al., 2018). Furthermore, whilst interacting with others; management, diversity, climate and culture as well as encouraging creativity through techniques, such as workshops, feedback and interaction, are important for fostering creativity and the expansion of knowledge for creativity and organisational success (Blomberg et al., 2017).

2.3.4. Motivation

Amabile (1996a) posits that there are types of motivation that can be used to drive creativity among individuals: intrinsic motivation and extrinsic motivation. Intrinsic motivation allows individuals to be guided by an inner feeling of curiosity, enjoyment and involvement in the work they do, as well as the organisation domains. Extrinsic motivation is guided by the idea of a reward, a met deadline or a goal that does not fall part of the work itself. However, Amabile (1996a) further notes that intrinsic motivation regarding the task at hand will yield better creativity outcomes than that of extrinsic motivation.

Motivation is important for creativity as all the other prerequisites of creativity, namely knowledge, skill determines the whether the individual can to the task at hand, but its motivation that determines how individual will do the task (Amabile, 1996a). Furthermore, motivation is considered the most important as it is strongly influenced by "subtle social influences" (Amabile, 1996a), such as leadership and environment. Hunter et al. (2018) note that leaders play a vital role in fostering creativity among employees. Numerous scholars note that the most significant factor in fostering creativity in organisations is leadership (Anderson et al., 2014; Hunter et al., 2018; Koh et al., 2019; Lee et al., 2020; Hughes et al., 2018). Therefore, leaders need to be cognisant of which motivation factors are used to motivate employees, especially if they are intending for heightened creativity as an outcome.

Motivation can serve as a means to compensate for a lack of creative skill. Nevertherless, a lack in motivation cannot be compensated by any amount of skill when it comes to creativity (Amabile, 1996a). The absence of intrinsic motivation may result in a lack of productivity and a failure to complete the given task at hand, or rather completing it merely to fulfil an extrinsically motivated goal (Amabile, 1996a). In accordance with the knowledge component of creativity, an individual driven by intrinsically motivation will exhibit a sense of curiosity towards other domains within the organisation, thereby going beyond their performance of their responsibilities in order to enhance organisational creativity (Amabile, 1996a). Blomberg et al. (2017) notes that the right balance between intrinsic and extrinsic motivation is needed to foster creativity, however intrinsic motivation is vital to encourage creative behaviours.

Furthermore, Amabile (1996a) notes that the organisational environment is fundamental in impacting an individual's creativity as any change in the environment can cause a change in the expertise, creative thinking and intrinsic task motivation components that result in creativity. Furthermore, a change in environment is known to cause the biggest impact on intrinsic task motivation compared to expertise and creative thinking (Amabile, 1996a).

Mai et al. (2022) highlights the growing significance of creativity as a valued skill within organisations. Anderson et al. (2014), Lee et al. (2020) and Saad and Agogué

(2023) note that the future of business is reliant on creativity to succeed. Grant and Russel (2020) include engaging in innovative activities and by default creativity; together with promoting flexibility, merging resources such as people, knowledge and skills and using communication technology; in the definition of agile working. Agile working, also referred to as remote work, is needed to survive in the evolving landscape of work as well as to achieve organisational effectiveness (Grant and Russel, 2020; Grant et al., 2019). Agile working takes into consideration very strongly the personality of individuals towards achieving the assigned tasks, as well as the individual's well-being as key factors to achieving organisational success.

2.4. The hybrid work life experience

Understanding the environment is of paramount importance to be successful in this "new normal" given the disruption of COVID-19 (Gashi et al., 2022). With acknowledging the necessity of implementing e-work in order to effectively carry out hybrid work, it becomes crucial to thoroughly understand the intricate dynamics of the home environment itself, which encompasses various family and caregiving responsibilities, as well as how individuals co-exist in the same environment with those they live with now that the environment needs to be suited to that of a work environment. Furthermore, it is imperative to understand the nature of the relationship between individuals and the organisation, which includes more specifically its leaders, in the context of working remotely. The significance of examining these factors cannot be overlooked, as they play a pivotal role in shaping and dictating the effectiveness and success of hybrid work environments (Chamakiotis et al., 2021).

Organisations need to be equipped to handle the long-term impact of hybrid work. Failure to adapt to this new model of work can have negative consequences for organisational success. Linked to this study, the need for creativity from employees has become increasingly significant and while employees may be more creative when they have opportunities for in-person interaction, the current shift towards remote work challenges the traditional organisational landscape (Fayard et al., 2021). To address these challenges, Fayard et al. (2021), Chamakiotis et al. (2021); Gratton (2020, 2021) and Hughes et al. (2018) propose that the future of work should

be intentionally designed in order to foster desired organisational outcomes.

Consequently, it is now more crucial than ever to understand the relevant components of the e-working experience, as remote e-working can only achieve success if properly understood and implemented (Gashi et al., 2022). Furthermore, understanding the e-working experience and the life of an e-worker is imperative now more than before, having evolved to take into account remote work and hybrid models as employees continue to work from home (Charalampous et al., (2023).

2.5.   Hybrid work as an extension of remote work

Grant et al. (2019) note that the practice of working from another location as opposed to the office has been in existence for a number of years. Previously referred to as teleworking, remote working, and more lately labelled "agile working" (Grant et al., 2019). Chamakiotis et al. (2021) and Ancona et al. (2020) point out another term to describe this concept, namely, "virtual work". Virtual work is defined as communication in real-time or at separate times between dispersed employees utilising computer-mediated communication (Chamakiotis et al., 2021; Raghuram et al., 2019; Saad & Agogué, 2023). Virtual work is a term used to refer to individuals working remotely and communicating with team members globally. However, the COVID-19 pandemic has reshaped this concept, with virtual work now often comprising more local based employees communicating as if they were in different countries, reflecting the evolving nature of the term "remote work" (Chamakiotis et al., 2021).

Chamakiotis et al. (2021) emphasise numerous studies that focus on virtual work with limited studies focussing on hybrid work. The term "hybrid work" is an extension of virtual work or remote work, focusing on communication in real-time between dispersed employees using a mix of computer-mediated communication and face-to-face (Chamakiotis et al., 2021; Saad & Agogué, 2023). As a result of the COVID-19 pandemic, there has been an increase in the utilisation of computer-mediated communication (Chamakiotis et al., 2021). Especially with the rise of technological advancements, work can now be conducted at any given time or location, and not necessarily confined to a traditional office setting (Gashi et al., 2022; Grant et al.,

2019).

"Remote e-work" is a term used to define work that takes place at any place and any time, whilst using information and communication technologies to communicate with team members and managers (Grant et al., 2013; Charalampous et al., 2021). Grant et al. (2019) define remote e-workers as individuals who use technology to do their jobs away from the main office at any time of the day and at any location they choose and uses the term "e-work" to describe the use of any electronic medium to complete tasks. In the South African context, the term "hybrid work" is used to define work that makes use of flexible locations and time-based aspects (Business Tech, 2023; Indeed, 2023), which generally means the same as what is defined as remote work or remote e-work.

The perception of the office has shifted since the post-COVID-19 era. Previously, the office was seen primarily as a place to carry out tasks and hold routine meetings. However, with the advancements in information and communication technologies, knowledge workers can now accomplish much of their work remotely from home. This has led to the emergence of a hybrid workplace, whereby employees alternate between their home workspace and a traditional office building (Chamakiotis et al., 2021; Fayard et al., 2021; Gratton, 2020, 2021). The nature of new hybrid work models works depending on the procedures and agreements between employees and employers. However, Choudhury et al. (2022), notes that hybrid work can be categorised into 3 levels in order to better understand the hybrid context. High work from home entails 0-23% of working hours spent at the office, intermediate work from home is 23-40% of working hours spent at the office and low work from home is defined as greater than 40% of working hours spent at the office. These values were taken into consideration to design the statistical control of hybrid workdays of this study.

Taking into consideration that hybrid work models can now be categorised, this way of work may be adopted as the permanent future of work (Gratton, 2020, 2021). Similarly, Ancona et al. (2020) note that hybrid environments will be permanent ways of working in the future, therefore it is essential to manage and investigate them, and identify the best outcomes.

2.6. Electronic-Work Life (E-WL)

E-Work Life encompasses the individual experience of remote e-working, and considers its pros and cons. For some, the advantages include enhanced productivity, flexibility, reduced work-life conflict, increased satisfaction with tasks, and an overall improvement in work-life balance. In addition, this way of working saves time that would have been spent commuting.

On the other hand, the cons of e-working remotely are said to be linked to compromised well-being, heightened task-related pressure, excessive communication leading to annoyance, and the tendency to overwork, which ultimately impacts work performance and efficacy (Grant et al., 2013, 2019). In effect, this is the same experience of employees that work hybrid as hybrid encompasses e-working from home (Chamakiotis et al., 2021).

The concept of E-WL has undergone a process of development over a period of more than ten years, beginning in 2011 and extending to 2023. This process has involved the incorporation of literature findings, as well as the utilisation of both qualitative and quantitative approaches, which have been progressively refined and expanded on during this time period. The concept aims to explore the psychological effects experienced by individuals who engage in remote e-work, while also taking into account the perceptions surrounding productivity, work-life balance, flexibility, and the level of trust within the organisation. These factors also contribute to the overall well-being of the individual, encompassing aspects of health and vitality. Nevertheless, the paramount aspect of this concept is its comprehensive coverage of the key elements that impact the lives of remote e-workers, including their interactions and the manner in which they coexist within the physical space they occupy while engaging in remote e-work (Charalampous et al., 2023, 2022; Grant et al., 2013, 2019).

Table 2.3. is an evolution of the scale used to measure E-WL, showing the progression. These scales were developed to guide the development of strategies by organisations and leaders so that they are able to tailor and improve the remote e-working experience as well as offer support to employees as they are put in this situation often having never having experience in this practice before COVID-19.

Therefore, the most recent development, seen in Table 2.3, has been research due to the hybrid circumstances imposed on the previous remote e-working experience (Charalampous et al., 2023). This scale was altered in 2023, post-COVID-19, to add the words "home", to incorporate the location and time aspects of remote work, as well as to understand the individual's social life as part of the remote and hybrid work life experience (Charalampous et al., 2023).

Evolution of the e-work life scale to include hybrid work		
Year	Comments	No. of scale items
Grant et al. (2011)	Initial scale developed 104 items were tested to measure: Boundaries/overspill/work/family interference, Internal conflict, time-based conflict, relationships, social support, general work-life balance, trust, supervision, demand/control, job effectiveness, and e-working competencies/ work characteristics	39
Grant et al. (2013)	Qualitative analysis using semi-structured interviews	
Grant et al. (2019)	39 items revisited, tested for correlation analysis, reduced to 28 items New scale developed measuring: Work-life interference, effectiveness/productivity, organisational trust, and flexibility	17
Charalampous et al. (2022)	Qualitative analysis using semi-structured interviews due to remote e-working	

Evolution of the e-work life scale to include hybrid work		
Year	Comments	No. of scale items
Charalampous et al. (2023)	17 items revisited, added items based on qualitative analysis Wording was reworded and questions added to reflect remote e-work. Final scale measured the following 4 dimensions: Organisational trust, flexibility, work-life interference, productivity	20

Table 2.3: Evolution of the e-work life scale to include hybrid aspects of remote e-work

Source: Researcher's representation

2.7. E-WL and creativity

Research on the relationship between remote work and creativity is limited (Reiter-Palmon et al., 2021). The globalisation of the labour force has resulted in employees working in dispersed locations, consequently resulting in an emergence of hybrid work environments. This phenomenon was further accelerated as a consequence of the global COVID-19 pandemic. In light of its recent emergence, there is an even more limited amount of research available on hybrid work, particularly in terms of its impact on creativity (Reiter-Palmon et al., 2021). In an attempting to understand this, it makes sense to understand the remote work experience in relation to hybrid work by unpacking the four dimensions; namely (1) work-life interference, (2) flexibility, (3) productivity and (4) organisational trust; that have been extensively researched for over a decade, with the aim of understand their impact on creativity. Based on the e-work life construct, the following was hypothesised:

H_1: E-WL has a significant positive relationship with Creativity.

2.7.1. Work-life interference and creativity

Charalampous et al. (2022; 2023), Gashi et al. (2022) and Grant et al. (2019) indicate that the concept of work-life balance pertains to the proficiency exhibited by e-workers in effectively handling the boundaries between work-related and non-work-related tasks as well as work and non-work situations. Work-life interference refers the interference of technology, such as emails, calls etc, after working hours which is shown to hinder work-life balance and in turn cause more home and family conflict (Charalampous et al. 2023). Charalampous et al. (2022; 2023) and Grant et al. (2019) note that the wording 'work-life balance' and 'work-life interference' pertain to the same concept in the E-WL construct, meaning that a higher degree of work-life interference signifies a lower level of work-life balance.

Furthermore, Costa et al. (2023) note that creativity can emerge in a hybrid environment when working from home if employees make an intentional effort of being creative to benefit their roles, progress in the organisation as well as the organisation itself. Amabile (1996a) notes this as the motivation that spurs creativity. However, when working from home, creativity can be hindered if there is work interference especially home conflict (Costa et al., 2023). According to Gashi et al. (2022), this kind of conflict can arise when employees tend to work more when working from home, as time is taken in their day to do non-work-related tasks. This causes blurred lines between work and home life, impacting the role they play within their families, resulting in conflict. Therefore, if there is a healthy work-life balance when working from home, this leads to higher creative behaviours. Charalampous et al. (2023) notes that poor working practices that show low levels of work-life balance are harmful to individuals, especially when they are displayed by role models and leaders within an organisation, and thus influence the behaviours of employees who mimic those harmful behaviours.

Working from home makes it harder to detach from thinking about work and causes additional stress, thereby negatively affecting mood and emotion. Charalampous et al. (2023) posits that since technology allows access to working from home, individuals have the option of working longer hours and are compensated by not being in the sight of their leaders. Furthermore, working at home means sharing the

home space with family and children, thereby further blurring the personal and work lines (Charalampous et al., 2023). Similarly, Grant et al. (2019) notes that less use of technology allows for more non-working time: time to recover and restore oneself before the next day of work. This alleviates the extra pressure that impacts the worker's essential "life away from work" (Grant et al., 2019). Furthermore, it is important to note that over-working and a having a lower work-life balance can influence one's mental health (Bakker et al., 2013; Grant et al., 2019). Having negative emotions hinders creativity, especially when it is combined with over-working and high work-load pressures (Blomberg et al., 2017; Elsbach & Hargadon, 2006). Therefore, the following is hypothesised:

> H_{1a}: Work–life interference has a significant negative relationship with Creativity.

2.7.2. Flexibility and creativity

Gashi et al. (2022) and Grant et al. (2019) note that flexibility is the e-workers perception of the time and how flexible that time is to get the task completed. Charalampous et al. (2023) extends that flexibility also involves the flexibility of the location at which the work gets done. Flexibility of this nature, including that to make decisions on completing a task and the flexibility to schedule the work within their work week they are able to produce more creative work (Amabile, 1996a; Elsbach and Hargadon, 2006).

Knowledge worker individuals reported that if they take time out during their day for breaks, this enabled them to think of "solutions" to work tasks and problems (Charalampous et al., 2023). This ties in with creativity, as when individuals think of solutions, this exhibits a creative behaviour that leads to individual creativity (Amabile, 1996a). Albrecht et al. (2023) notes that self-control and management even when trying to be flexible with work times allow for lower exhaustion and stress only if it doesn't spill over into non-working hours as sometimes high flexibility results high work life interference, hindering a healthy work life balance that is needed for creativity.

Tying in with the above section on work life balance/interference, Albrecht et al.

(2023) notes that women are more prone to having more work life interference, as they tend to use their flexibility to take care of children and do chores at home. This in turn causes work-home conflict that hinders the wellbeing and causes health concerns such as exhaustion and stress (Albrecht et al., 2023). This worsens when women engage in remote work, as this period coincides with their designated work hours, thereby inducing a sense of guilt to extend their working hours in order to accomplish their tasks (Michinov et al., 2022).

On the other hand, Charalampous et al. (2021) notes that flexibility in knowledge workers increases commitment, engagement and devotion to the organisation, thereby increasing job satisfaction. Flexibility can be regarded as a valuable asset that contributes to the overall work experience by enabling individuals to allocate attention to both their professional and personal lives. Furthermore, Charalampous et al. (2023) posits that these pros outweigh the cons. A positive remote e-work experience is where individuals feel trusted to do their work even though they are not "seen"; they are given the flexibility to work the hours they see fit, as long as the task gets done; and they are productive while having this flexibility. This description of an ideal remote e-working environment has the ability to alleviate stress, promote better mental well-being, and consequently foster a creative mindset that facilitates the creative behaviours (Charalampous et al., 2023). Therefore, the following is hypothesised:

> H_{1b}: Flexibility has a significant positive relationship with Creativity.

2.7.3. Productivity and creativity

Previous studies have shown that working from home has a positive influence on productivity (Fonner & Roloff, 2010; Gashi et al., 2023). "Knowledge work productivity" is described by Iazzolino et al. (2017) and Shujahat et al. (2019) as timelines in which to get a task done, as well as the quality and efficiency of the output. However, it is interesting to note that the dimensions that make up productivity includes autonomy, satisfaction, creativity and innovation (Iazzolino et al., 2017; Shujahat et al., 2019). Therefore, these are noted to be the prerequisites

of productivity.

Fonner and Roloff (2010) note that remote work gives individuals more time to focus on the task at hand, a better work-life balance and less involvement in office politics, thus giving them a positive mood and emotions. This in turn allows them to be more productive, and by effect, creative as well. Charalampous et al. (2023) notes that working e-work policies and processes allow for individuals to use the latest technology to communicate to team members as well as to do their job, this is therefore associated with increased performance and productivity.

According to Shujahat et al. (2019), organisations in the 21st century are mainly operating in the service sector and are powered by knowledge and the digital economy. There is a greater emphasis on the quality of service and production, thus, the most notable challenge for organisations during the 21st century is to enhance the "productivity of knowledge-workers" primarily in relation to unstructured "out-of-the-box" knowledge-based tasks (Shujahat et al., 2019). This indicates a shift as scholars previously concentrated on increasing the productivity of manual workers. Now studies prove that when knowledge is harnessed, individuals are better equipped to come up with new ideas and therefore knowledge workers are able to do a better job, which is needed in this digital knowledge-based economy (Shujahat et al., 2019).

However, Charalampous et al. (2021) note productivity increases, as employees tend to work longer hours when they work from home, and making use of too much technology that may cause distractions. Therefore, self-management is important in order to be creative (Amabile, 1996a) and productive (Grant et al., 2013; 2019). It is also important to manage the e-work life experience in order to be productive: this means that in addition to self-management, goals need to be set and met and distractions should be avoided, so that the work can be done during working hours (Grant et al., 2019). Therefore, the following is hypothesised:

> H_{1c}: Productivity has a significant positive relationship with Creativity.

2.7.4. Organisational trust and creativity

Charalampous et al. (2022; 2023) maintain that the concept organisational trust pertains to the feeling of e-workers trust in relation to their managers, leaders and organisation. When e-workers feel trusted, they feel positive emotions such as being content, grateful and proud of their work. Grant et al. (2019) and Charalampous et al. (2023) state that this trust allows for individuals to be loyal to their organisation, thereby giving them the motivation to go above and beyond. Amabile (1996a) notes this motivation to be conducive for fostering organisational creativity.

When e-workers do not feel the trust from their leader or organisation, it is reported that they experience guilt which leads to longer working hours. Charalampous et al. (2023) notes that leaders should avoid micromanagement and trust that individuals are doing their work effectively when remote e-working, as it is highly favourable to a successful e-working environment. Amabile (1996a) notes that giving individuals autonomy is a key ingredient to fostering creative behaviours.

Zhou and George (2001) assert that in the case of employees who already possess a high sense of responsibility, the act of closely monitoring their work and persistently encouraging them to adhere strictly to rules results in a lack of creativity, as they seldom deviate from conventional practices. Consequently, it becomes imperative for leaders to demonstrate trust in order to avoid excessive stringency, thereby permitting the emergence of creative behaviours that are only fostered when individuals are encouraged to think differently.

When employees experience organisational trust and are granted the flexibility to choose when and where they work, as well as the flexibility to attend to personal matters without feeling guilty, they exhibit increased productivity when engaging in remote work. Accordingly, this allows them to achieve a better work-life balance between their professional and personal lives, thus contributing positively to their mental well-being (Charalampous et al., 2023). In relation to creativity, the presence of a positive emotional state is associated with a sound mental state, which is recognised to enhance individuals' capacity for creativity (Amabile et al., 2005 & Blomberg et al., 2017).

Gashi et al. (2022) indicate that when e-knowledge workers perceive that their e-work facilitates their productivity and work-life balance, and when they operate within an organisation that provides support and trust, they report a greater sense of positivity in their remote work experiences. Understanding the relationship between creativity and its application in the hybrid work setting is crucial for organisations to understand the possibility of fostering creativity. Therefore, the following is hypothesised:

> H_{1d}: Organisational trust has a significant positive relationship with Creativity.

Chamakiotis et al. (2021) notes that additional research must be done so that leaders can understand the association between hybrid work environments and creativity, in order to effectively promote creativity in such settings. Furthermore, the support of management is imperative for the successful execution of e-working (Gashi et al., 2022).

2.8.   Leadership

Tourish (2020) posits that COVID-19 has caused challenges for both the theory and practice of leadership, since it is difficult for leaders to make decisions in unexplored territory. Theory regarding leadership in the contexts of COVID-19 and post-COVID-19 are currently being developed and provide little guidance or instruction. Tourish (2020) further notes that traditional leadership styles such as transformational and authentic leadership are insufficient. He suggests challenging traditional leadership styles or creating new ones that fit these new uncertainties and are better able to deal better with the complexity that COVID-19 has caused. In addition, current leadership styles should be investigated to unravel the dynamics and identify the elements that could aid this new world that requires to be reshaped due to the virus.

Alblooshi et al. (2021) note through a systematic analysis that transformational, transactional and authentic leadership styles are recognised to influence creativity and innovation in an organisational setting. Like these authors, the majority of studies in leadership focus on traditional organisational contexts, namely operations in

offices. However, it is worth noting that this has changed significantly: it is evident that a notable shift has occurred in response to the COVID-19 pandemic. It is characterised as an emerging trend that necessitates greater workplace flexibility, whereby employees split their workdays between remote home offices and traditional office settings (Gratton, 2021). This adjustment is reshaping the landscape of organisations and leading to an increased reliance on computer-mediated communication channels such as email over face-to-face interactions (Choudhury et al., 2022).

Cortellazzo et al. (2019) note that added digitalisation introduces new dynamics to the workplace, encompassing virtual working, new modes of communication, greater information accessibility and, most importantly, alterations in power structures, specifically in the interactions between leaders and followers. Due to this, evolving workplace dynamics have significant implications for leadership, requiring leaders to possess the understanding and skill to navigate these transformed environments successfully. Furthermore, the surge in the use of digital tools enables followers to engage in decision-making processes in real time, increasing their involvement (Cortellazzo et al., 2019). Both Cortellazzo et al. (2019) and Schwarzmüller et al. (2018) add that due to this, leaders should adopt a more inclusive approach to their leadership style and take their follower's ideas into account when making decisions. This gives followers more autonomy and, ultimately, a heightened sense of responsibility for their own work. Consequently, it is clear that autonomy is also necessary for creativity (Amabile, 1996b; Lee et al., 2020).

Uhl-Bien and Arena (2018) highlight that leaders are faced with the challenge of strategically positioning organisations and enabling their employees to adapt to increasingly demanding and rapidly changing contexts. In addition, leaders have the essential role of fostering an environment conducive to creativity and innovation, as a proactive measure to safeguard organisations from potential disruption and depletion.

Hughes et al. (2018) confirm that leadership stands out as the most important predictor of creativity amongst employees of an organisation. However, despite its significance, leadership for creativity is not properly understood, with existing

theories lacking the specific behaviours required to foster creativity among employees in order to benefit of their organisations (Carmeli et al., 2010).

On the other hand, Ye et al. (2019), emphasise that organisations should encourage inclusive leadership (IL), fostering innovation within their teams and incorporating it in hiring processes or in promotion considerations. In the same vein, Ye et al. (2019) argue that transformational leadership (TL) is widely considered the optimum form of leadership style for fostering creativity in the workplace, and that other theorists share the same viewpoint (Jiang & Chen, 2018; Koh et al., Mumford et al., 2023; 2019; Qu et al., 2015). However, according to Ye et al. (2019), that studies have shown the opposite, suggesting that TL may actually hinder creativity and innovation. Ye et al. (2019) encourage future research to shift away from TL and explore other leadership styles to gain a more precise understanding to foster innovation and, consequently, creativity, claiming that the absence of autonomy and independent thinking potentially constrains creativity, which is what traditional leadership styles do. Similarly, Cortellazzo et al. (2019) and Schwarzmüller et al. (2018) note that leaders should grant their followers greater autonomy as this, in turn, reduces the control-seeking behaviours used by traditional style leaders.

Ultimately, leaders are an integral part of an organisation, and their leadership style either makes or breaks the success of an organisation. They serve as catalysts for innovation and satisfaction for employees and aid in shaping the competitive edge for organisations. Most importantly, leaders are responsible for fostering an environment where employees thrive and prosper (Gong et al., 2021).

2.9. Inclusive leadership

The term "inclusion" has emerged as a prominent buzzword in the global business landscape (Korkmaz et al., 2022). Inclusive leadership is described and measured in three dimensions; namely, openness, accessibility, and availability behaviours, which are exhibited by the leader (Carmeli et al., 2010; Nembhard & Edmondson, 2006; Ye et al., 2019). Inclusion is said to provide organisations with a competitive advantage and, when implemented effectively, inclusive leadership has the potential to guide a workforce toward embracing a distinct diversity-oriented approach. It

strengthens the sense of belonging among employees, demonstrates appreciation, and supports the organisation's long-term mission for the future (Korkmaz et al., 2022).

Inclusive leadership is particularly significant in the South African context, given the historical backdrop of apartheid. The country and its people grapple with the enduring effects of a racially and economically segregated society, even though South Africa now operates within a highly regulated framework of equality, diversity, and inclusion. It becomes increasingly important for organisations to authentically integrate the value of inclusion into the workplace (Moodley, 2022).

Moodley (2022) maintains that the COVID-19 pandemic has not only changed the work environment but has redefined the dynamics of interactions among teams, employees and organisations. Economic pressures, alongside pre-existing challenges, have pushed the country and its people towards fostering more inclusive environments (Moodley, 2022). Furthermore, the digital advances in the business landscape have provided organisations with a more intricate understanding of their workforce, enabling the identification of unconscious biases which may manifest in hiring processes, promotional decisions and favouritism. Therefore, inclusivity is advised, as it offers a means to redress historical imbalances and foster a more equitable and inclusive workplace environment (Moodley, 2022).

Chamakiotis et al. (2021) and Feitosa and Salas (2021) note that the concept of virtual teams is not a recent development. However, virtual work has been forcefully transitioned to hybrid as a result of COVID-19. Many of the characteristics that teams and organisations shared with earlier virtual teams still appear (Chamakiotis et al., 2021). Chamakiotis et al. (2021) note that global virtual team literature may inform leadership designed to deal with the lasting effects of the pandemic with regard to leading hybrid teams. Subsequently, inclusive leadership shares success in leading earlier virtual teams (Gong et al., 2021; Shore et al., 2018).

Gong et al. (2021) indicates that there have been few studies focusing on inclusive leadership and the impact it has on innovation, and therefore on creativity, as a prerequisite for organisational success. However, since inclusive leadership focuses

on win-win relationships and builds trust with followers, it involves doing what is best for employees (Carmeli et al., 2010). Employees tend to want to repay this by going the extra mile, thus engaging in creative thinking (Choi et al., 2015).

Inclusive leadership fosters a supportive environment that appreciates the significance of employees' gaining knowledge in order to effectively fulfil the demands and expectations of their jobs (Choi et al., 2017). In essence, inclusive leadership fosters a workplace environment where employees feel encouraged and valued for their initiative, thereby inspiring and motivating employees to embrace a more proactive approach towards acquiring new skills and knowledge (Choi et al., 2017). Acquiring knowledge is a prerequisite for creativity (Amabile, 1996a).

Choi et al. (2015) and Gong et al. (2021) note that individuals tend to have more autonomy when reporting to inclusive leaders, and this in turn gives them more motivation to perform tasks correctly and efficiently. Similarly, Uhl-Bien note that too much discipline and control over employees can limit creativity and innovation. Lin et al., (2022) and Muhammed (2021) note that inclusive leaders actually accept their followers' failures and listen to their feelings (high inclusive leadership behaviours) and this results in individuals who are effective and productive, as well as not being limited in their thinking. Thinking that has no boundaries, in turn, results in creative thinking (Amabile, 1996a).

On the other hand, an exertion of low inclusive leadership behaviours limits employees from involvement in learning new skills and carrying out creative tasks, ultimately limiting the potential growth and development of both the individuals and the organisation as a whole, as it restricts the opportunities for knowledge acquisition, inhibits innovation and therefore creativity, and dampens employee engagement and motivation (Carmeli et al., 2010).

Inclusive leaders give attention to individuals by attending to their specific needs, which gives them a sense of identity therefore improving positive emotions and job satisfaction. This creates an open, accessible, and calm environment that reduces stress and improves working conditions (Gong et al., 2021) and is generally healthy for fostering creativity (Amabile, 1996a; Amabile, 2005; Blomberg et al., 2017), in the

context of the new hybrid work environment (Moodley, 2022). Therefore, the overall positive influence of the hybrid work life experience on creativity is increased when there is a greater exertion of inclusive leadership in a hybrid work environment. The following is therefore hypothesised, and the sub-hypotheses are detailed in Chapter 3:

H$_2$: Inclusive leadership significantly moderates the relationship between E-WL and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

2.10. Moderation studies

The introduction of new technologies that gave rise to the formation of virtual teams brought about significant changes in the way people work in the workplace. These changes had an impact on team dynamics and cognition, as virtual meetings were introduced, which in turn had an effect on creative performance (Reiter-Palmon et al., 202; White, 2014). After the forced lockdown, Microsoft Teams reported a 100% increase in use of the platform due to the pandemic (Microsoft, 2020; Reiter-Palmon et al., 2021). This is evidence that organisations had to alter their offerings to adjust to hybrid ways of working (Microsoft, 2020), therefore also causing a shift in leadership behaviours to manage those who had to adapt to hybrid e-working practices (Cortellazzo et al., 2019).

In contexts such as hybrid work, post-COVID-19, and remote working, strong inclusive leadership has gained recognition for its ability to cultivate conducive environments, thereby enabling optimal employee performance and fostering positive results. Gong et al. (2021) and Hirst et al. (2009) note that inclusive leadership is ideal in new and volatile environments and can effectively make people work together to transform crises into favourable outcomes. Numerous studies have also investigated the influential role of high exerted inclusive leadership in attaining favourable outcomes (Gong et al., 2021; Hirst et al., 2009; Shore et al., 2018; Sürücü et al., 2023).

2.11.   Conclusion

This chapter highlighted the theory that supported the hypotheses for this research, which focused primarily on exploring creativity as an outcome in the context of hybrid work, while using the e-work-life construct to understand the hybrid work environment. The theory in this chapter strongly suggested that inclusive leadership is considered the leadership style that is the most appropriate for remote work, as well as for effectively navigating the unique circumstances of the twenty-first century. The following chapter continues this account of the investigation into the research questions and hypotheses.

CHAPTER 3: RESEARCH QUESTIONS

3.1. Introduction

The aim of this study is to investigate the relationship between the life of an electronic worker and creativity within a hybrid work environment in South Africa. Furthermore, this research sought to test the moderating role of inclusive leadership between the variables.

Chapter 1 introduced the background, research problem, and the purpose of this research. Chapter 2 unpacked the key constructs in the form of a literature review that outlined the conversation in the literature. The objective of this chapter is to highlight the research questions and hypotheses.

Figure 3.1. gives an overview of the chapter, providing a visual of its structure and content.
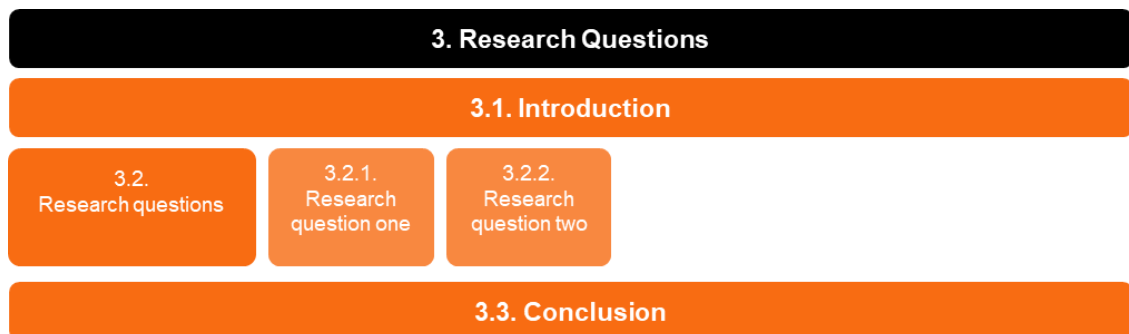
Figure 3.1: Chapter 3 - Research questions
Source: Researcher's representation

3.2. Research questions

Chapter 2: Literature Review served as a foundation that led to two main hypotheses. The researcher tests each hypothesis and sub-hypotheses as per the following two research questions:

3.2.1. Research question one

Is there a significant positive relationship between E-WL and creativity in a hybrid work environment?

The perception of the office has shifted since the pandemic, with knowledge workers able to complete much of their work remotely from home. This has led to the emergence of the hybrid workplace (Chamakiotis et al., 2021; Fayard et al., 2021; Gratton, 2020, 2021). In the relationship between the hybrid work-life experience (E-WL) and creativity, the organisational environment is known to be fundamental in impacting an individual, as any change in the environment can cause a change in expertise, creative thinking, and the intrinsic task motivation components that result in creativity (Amabile, 1996a).

The hybrid e-work-life experience includes the dimensions of work life interference, flexibility, productivity, and organisational trust (Charalampous et al. 2023). The first dimension, work-life balance, is known to be crucial for e-workers to manage their work-related and non-work-related tasks effectively. However, technology, known as a work-life interference, can hinder this balance (Charalampous et al. 2023) and lead to home and family conflict (Costa et al., 2023). A higher degree of work-life interference signifies a lower level of work-life balance and can lead to overworking (Bakker et al., 2013; Grant et al., 2019), which affects one's mental health by negatively influencing mood and emotion (Blomberg et al., 2017; Elsbach & Hargadon, 2006) and therefore can dampen creativity (Amabile, 1996a).

The second dimension is flexibility, and this, too, is known to allow individuals to produce more creative work (Amabile, 1996a; Elsbach and Hargadon, 2006). Flexibility among knowledge workers boosts engagement and commitment to the organisation, which in turn promotes job satisfaction (Charalampous et al., 2021). Being flexible allows people to give equal weight to their personal and professional life which also enhances the entire work experience. Consequently, this fosters a creative mindset that facilitates the creative behaviours (Amabile, 1996a).

The second dimension is flexibility, and this, too, is known to allow individuals to

produce more creative work (Amabile, 1996a; Elsbach and Hargadon, 2006). Flexibility among knowledge workers boosts engagement and commitment to the organisation, which in turn promotes job satisfaction (Charalampous et al., 2021). Being flexible allows people to give equal weight to their personal and professional life which also enhances the entire work experience. Consequently, this fosters a creative mindset that facilitates the creative behaviours (Amabile, 1996a).

The third dimension is productivity (Charalampous et al., 2023), e-work regulations and processes that enable people to use the newest technology for both work and team communication, which is linked to improved performance and productivity. Working remotely also allows employees more time to concentrate on their current tasks, allows a better work-life balance and less exposure to office politics, all of which improve their mood and emotions (Fonner and Roloff, 2010). This, in turn, has a positive effect on creativity (Amabile, 1996a).

Lastly, the fourth dimension is organisational trust. Grant et al. (2019) and Charalampous et al. (2023) note that this dimension of the remote and hybrid work life experience enables individuals to be devoted to their organisation, which inspires them to go above and beyond their regular responsibilities. According to Amabile (1996a), this motivation is key to encouraging creativity.

In summary of the above, this research proposed the following hypotheses in a hybrid work environment:

H_1: E-WL has a significant positive relationship with Creativity.

    H_{1a}: Organisational trust has a significant negative relationship with Creativity.

    H_{1b}: Flexibility has a significant positive relationship with Creativity.

    H_{1c}: Work–life interference has a significant negative relationship with Creativity.

    H_{1d}: Productivity has a significant positive relationship with Creativity.

3.2.2. Research question two

Is there a significant moderating effect of inclusive leadership on the relationship between E-WL and creativity in a hybrid work environment?

Firstly, the characteristics that made up earlier virtual teams are still shared with current remote and hybrid teams (Chamakiotis et al., 2021). Inclusive leadership shares success in leading earlier virtual teams (Gong et al., 2021). Secondly, inclusive leaders that exert high inclusive leadership behaviours tend to have employees that are more effective and productive, and are not limited in their thinking (Lin et al., 2022; Muhammed, 2021). This behaviour in individuals, in turn, fosters the emergence of creative thinking, which enhances creativity (Amabile, 1996a) On the other hand, low inclusive leadership behaviours hinder employees' growth and development potential and the gaining of knowledge, as well as engagement and motivation (Carmeli et al, 2010). These behaviours are vital in fostering creativity (Amabile, 1996a).

This research proposed the following hypotheses in a hybrid work environment:

H_2: Inclusive leadership significantly moderates the relationship between E-WL and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

H_{2a}: Inclusive leadership significantly moderates the relationship between *organisational trust* and *creativity* so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

H_{2b}: Inclusive leadership significantly moderates the relationship between *flexibility* and *creativity* so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

H_{2c}: Inclusive leadership significantly moderates the relationship between *work-life interference* and *creativity* so that inclusive leadership exerts a weaker positive influence on creativity in a hybrid work environment.

H_{2d}: Inclusive leadership significantly moderates the relationship between *productivity* and *creativity* so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

3.3. Conclusion

This chapter provided a brief overview of the hypotheses and sub-hypotheses, with theory from existing research to substantiate them. The following chapter will explore the methodological decisions that were made to carry out this study.

CHAPTER 4: RESEARCH METHODOLOGY

4.1. Introduction

This chapter comprises an account of the research methodology that was applied to test the hypotheses that were developed in Chapters 2 and 3. The detailed methodological choices outlined here were informed by existing literature. Figure 4.1. provides a graphic depiction of the structure and content of the chapter:
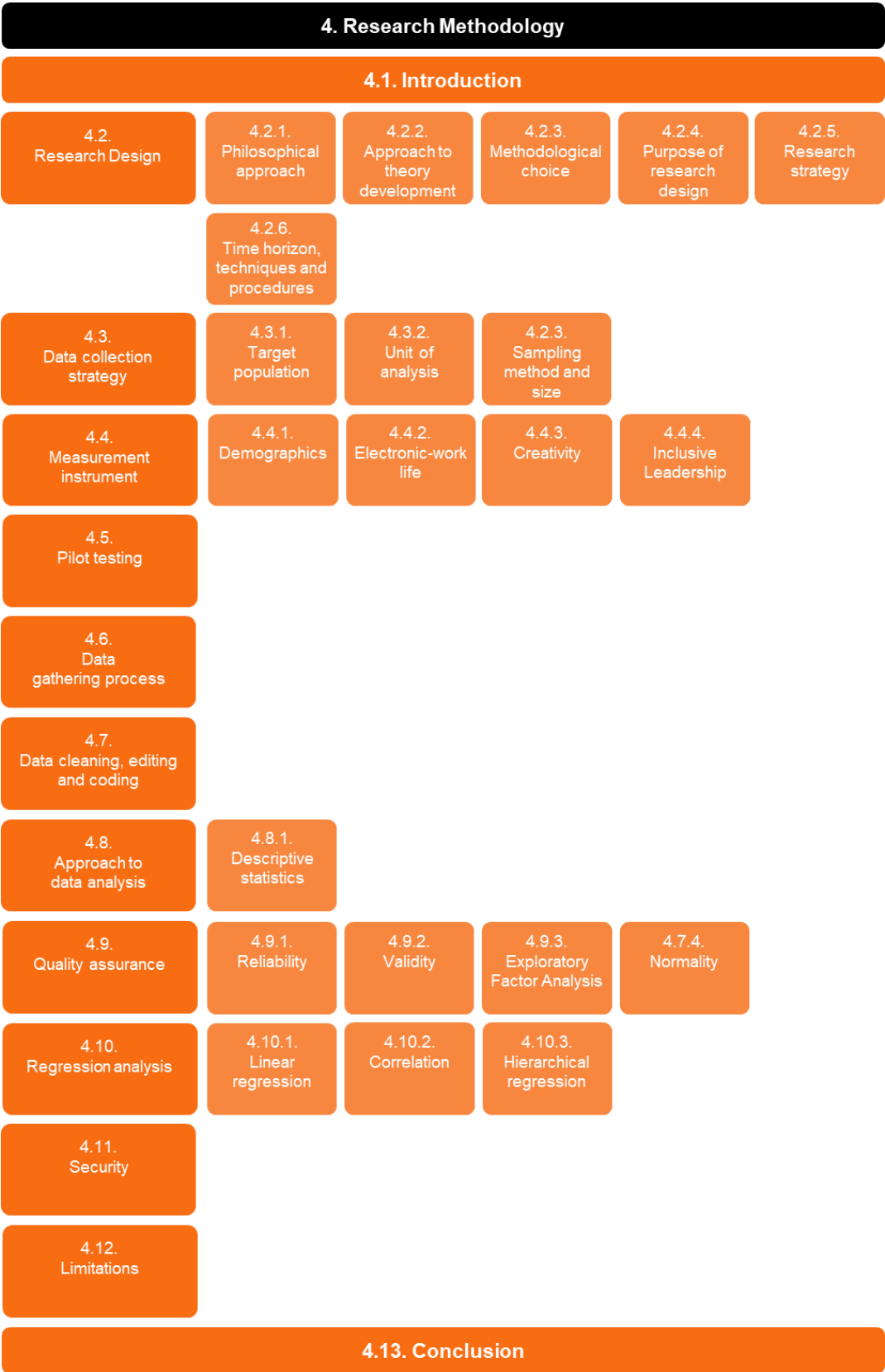
Figure 4.1: Chapter 4 - Research methodology overview

Source: Researcher's representation

4.2. Research design

According to Asenahabi (2019), a study must follow specific methods and adhere to appropriate norms and criteria for assuring validity and reliability; it must also adopt a systematic and methodical approach in order to be classified as research. Therefore, Figure 4.2. illustrates the "research onion", which outlines the methods adopted in this research to ensure a valid and reliable research design (Saunders and Lewis, 2018).
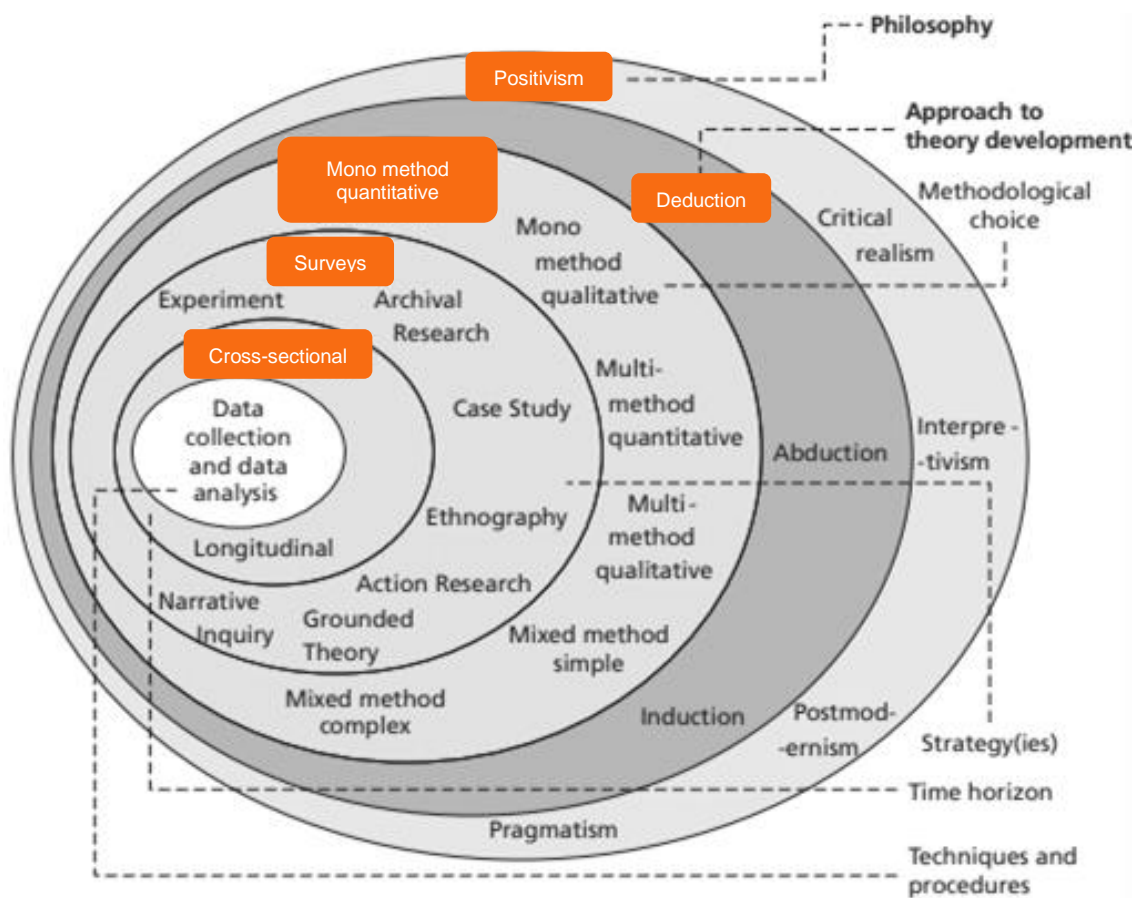
Figure 4.2: Research onion adapted from Saunders and Lewis (2018)

Source: Adapted researcher's composition

Table 4.2. expands on the decisions illustrated in the above research onion. It presents the research choices, including the methodology, chosen method, and reasoning for the choices.

Methodology	Chosen method	Reasoning
Philosophy	Positivism	To achieve objectivity unaffected by human interpretation or biases (Creswell & Creswell, 2018; Nyein et al., 2020; Saunders and Lewis, 2018; Scotland, 2012).
Approach	Deductive	To examine and describe the causal relationships among variables (Bohl, 2019; Saunders and Lewis, 2018).
Methodological choice	Mono-method quantitative and descriptive	Previous research is similar in nature; to achieve objectivity (Creswell & Creswell, 2018; Bryman, 2011; Saunders and Lewis, 2018).
Research strategy	Online surveys/ questionnaires	To cost-effectively allow for numerical data to be drawn from sizable samples in a limited amount of time (Saunders and Lewis, 2018).
Time horizon	Cross-sectional	To allow for the objective to be reached in the given timeframe (Saunders and Lewis, 2018).
Sample	Non-probability, purposive	To allow for logical generalisations and maximum variation (Creswell, 2014; Saunders and Lewis, 2018).
Measurement instruments	Developed instruments	To ensure validity and to be able to allow for comparisons with existing theory (Carmeli et al., 2010; Charalampous, 2023; Michinov et al., 2022; Zhou & George, 2001).
Data analysis	Descriptive and inferential statistics (Pearson's coeffiecient, hierarchical multiple regression analysis)	To identify perceptions and test hypotheses (Saunders and Lewis, 2018).

Methodology	Chosen method	Reasoning
Data quality	Cronbach alpha, factor analysis, histograms, Quantile-Quantile Plots	To assess reliability and validity (Russel, n.d.; Saunders and Lewis, 2018).

Table 4.3: Methodological choices and reasoning

Source: Researcher's composition

4.2.1. Philosophical approach

According to Creswell and Creswell (2018), research philosophy pertains to a set of principles or beliefs that have a significant effect on both the research itself and the methods used to conduct the research. Also termed a 'worldview', the chosen philosophy for any research, whether quantitative, qualitative or missed methods, plays a crucial role in informing the research design. Based on this perspective, four predominant worldviews emerge: positivism, constructivism, transformation, and pragmatism. Saunders and Lewis (2018) note five worldviews, namely, positivism, realism, interpretivism, postmodernism and pragmatism. However, their five philosophies are included in the four noted by Creswell and Creswell (Creswell & Creswell, 2018).

In research, positivism is commonly embraced to validate theories and explore the underlying factors of selected variables. On the other hand, constructivism is favoured for the generation and understanding of theories, making it a common choice in qualitative research. The transformative worldview aligns itself politically with notions of power and justice, making it a suitable option for driving change and informing transformative actions. The pragmatic worldview focuses on understanding the implications of actions and is frequently used in mixed-methods research, where a problem-centred approach is needed (Creswell & Creswell, 2018). Saunders and Lewis (2018) note that the assumptions of these philosophies fall into three categories: ontological, epistemological and axiological.

A positivist philosophical stance, quantitative in design, was employed in this research, to guide the development of knowledge through this research process. Positivism presupposes the existence of true reality (ontology), the possibility of

objectively studying this reality (epistemology), and the benefit of achieving objectivity and control (axiology) (Saunders & Lewis, 2018).

An epistemological approach is appropriate in conducting research in organisational contexts, as it informs methodological choices regarding data collection and analysis. This results in the benefit of organisational decisions (Bell et al., 2019). In line with the research context of hybrid work, the epistemological view enables moderators to be tested, given the relationship between the variables. Drawing on this epistemological view, Nyein et al. (2020) and Scotland (2012) postulate that positivism is used largely in organisational studies involving members of an organisation. Similarly, Saunders and Lewis (2018) note that positivism involves the study of observable social realities such as organisations and people. In line with the aim of this research, Scotland (2012) and Nyein et al. (2020) note that the goal of positivism is to identify cause and effect in research and to explain relationships.

Creswell and Creswell (2018) state that this philosophy is generally embraced through the measurement of objective reality as it exists in the world. Saunders and Lewis (2018) note that a positivist philosophy is applied to provide accurate data, unaffected by human interpretation or bias. This, in turn, results in law-like generalisations. For these reasons, this philosophy of hybrid work was suited to this research, to which the beliefs and assumptions inherent in this approach are applicable. The research strategy involved surveying respondents' perceptions of the life of an e-worker in a hybrid context; it was therefore chosen in order to remove any bias on the part of the researcher regarding hybrid work and creativity.

4.2.2. Approach to theory development

According to Saunders and Lewis (2018), the realm of theory development can be approached through three different approaches: deduction, induction and abduction. Adopted into quantitative research, the deductive approach involves the development of hypotheses and the testing of existing theory. Testing the hypotheses is done by collecting and analysing data to determine whether the result supports the established theory. The inductive approach, however, focuses on observations and the formation of generalisations, which subsequently lead to the

development of theory. This is the approach adopted in qualitative research. The abductive approach is the combination of deduction and induction and is therefore mainly used in mixed-method research.

Therefore, in alignment with Chapters 2 and 3, the chosen approach to theory development in this research is the deductive approach. Saunders and Lewis (2018) concur with this research design, in which a deductive approach was applied and appropriate measures were adopted to explain causal relationships between variables and test the research hypotheses.

The deductive approach was also chosen due to its ability to enable the outcomes of this study to make a valuable contribution to the leadership theory that served as the foundation of this research, as well as to the body of leadership knowledge in general (Bohl, 2019). Yukl and Gardner (2019) note that there are three types of variables that characterise leadership theory: the characteristics of leaders, the characteristics of followers and the characteristics of the situation. The philosophy of leadership theory encourages researchers to consider the influence of contextual factors (Bohl, 2019), such as the unique challenges and opportunities present in hybrid work environments. By incorporating this contextual factor, this research has shed light on how the relationships between different leadership approaches are shaped and influenced by their contexts.

Leadership theory recognises that environments are not static but constantly evolving, and leaders must adapt their approaches accordingly (Bohl, 2019). This understanding highlights the inseparable relationship between leaders and organisational contexts. By acknowledging the dynamic nature of leadership, this research was able to test the relationship between E-WL and creativity, and the role of inclusive leadership in this relationship. In response to the changing demands of hybrid work environments, investigating the role of inclusive leadership can contribute to the advancement of leadership theory in this regard.

4.2.3. Methodological choice

Creswell and Creswell (2018) note that there are three types of distinct

methodological choices when it comes to research design, namely, quantitative, qualitative and mixed methods. Quantitative approaches consist of experimental and non-experimental that include surveys. Qualitative approaches make use of narratives, phenomenology, grounded theory, ethnographies and case studies. Mixed method studies are made up of both qualitative and quantitative approaches.

Based on Chapter 3, this research aimed to employ various statistical tests to determine, measure and comment on the relationship between the variables. Based on the use of existing theory that is rearticulated into research questions, this research adopted the mono-method quantitative approach (Saunders & Lewis, 2018). It was explicitly designed to be quantitative rather than qualitative, given the non-objective approach that was adopted. Considering the research questions, the researcher worked in a hybrid work environment, which could, potentially, introduce unconscious bias, so this approach was chosen to maintain research quality and minimise potential biases. Furthermore, Bryman (2011) notes that research in leadership and organisational studies is predominately reliant on the mono-method quantitative approach and claims that leadership studies are largely represented by questionnaires. Similarly, Nyein et al. (2020) note that a positivist approach largely depends on quantitative approaches that use numerical data drawn from sizable samples to perform statistical analyses.

4.2.4. Purpose of research design

Scotland (2012) and Bell et al. (2019) note that positivist research can also be defined as descriptive and factual. Saunders and Lewis (2018) suggest that descriptive research is planned to result in accurate depictions of events, people or circumstances; this requires the collection of data that can be measured quantifiably.

Employing a descriptive design for this research was therefore appropriate, as it measures the creativity (event) among individuals (people) within a hybrid E-WL context (circumstance). In addition, IL is included in this research to assess its impact on individuals (people) and ascertain if there is a stronger relationship between the variables (event) within this particular context (circumstance). The reasoning behind employing a descriptive research design was reinforced by exploration of the

comprehensive research undertaken on the topics of E-WL, creativity, and IL. The objective of this research was to contribute to the existing body of knowledge by investigating the relationship between E-WL and creativity, while taking into account the role of IL within the context of a hybrid work environment.

Furthermore, Costa et al. (2023) have measured creativity within a remote working context using the creativity scale developed by George and Zhou (2001), and adapted it to the COVID-19 pandemic. Similarly, the principal author of the E-WL scale has extended the research from qualitative to quantitative approaches, as explained in Chapter 2 (Charalampous, 2023). There is therefore no point in duplicating the qualitative segment. Instead, this situation presents an opportunity to leverage prior research as a basis and expand it through a descriptive study, building on the established groundwork the groundwork of previous scholars.

4.2.5. Research Strategy

This research adopts the survey method as a research strategy for data collection. One of the survey methods that allow for quantifiable measurement is using questionnaires (Maula & Stam, 2020; Saunders et al., 2016; Scotland, 2012). Surveys that include questionnaires are frequently used in business and management research, as they are easily understandable, allow for participation by a large population and are cost-effective (Bell et al., 2019; Saunders & Lewis, 2018). This approach to data collection was consistent with the intention of this research, as it enabled the use of questionnaires relating to hybrid work, creativity and IL that had been employed successfully in other studies. Furthermore, descriptive research is often structured in nature, as information is gathered via the asking of questions, but without manipulating data (Saunders & Lewis, 2018).

4.2.6. Time horizon, techniques and procedures

Saunders and Lewis (2018) point out that surveys are a compelling option for individuals who have a limited amount of time to gather data, often an academic year, which was true of this research. Using a cross-sectional design allowed for these time constraints. Questionnaires were sent out over a period of four weeks, in August

and September 2023. Saunders and Lewis (2018) agree that a cross-sectional research design depicts data collection from participants at a single period in time. This is often referred to as a "snapshot" and allows for the same data to be collected from different people in multiple settings. In doing so, the data for this research was collected by means of a self-administered, structured questionnaire, using an online tool, namely Google Forms, in a cross-sectional time horizon. This study was also advantageous in the sense that it took place in the post-COVID-19 period, which allowed for a unique sample to be explored at a point in time.

4.3. Data collection strategy

4.3.1. Target population

In testing the research hypotheses, Creswell (2014) and Saunders and Lewis (2018) emphasise the importance of selecting the sample population. As a result of the researcher's networks and the remote and hybrid work knowledge worker jobs advertised in the region (Indeed, 2023), the target population for this research is specific: it comprises knowledge workers in various organisations in South Africa.

While the outcomes of this study will have relevance for all employees in organisations, the focus of this study will target followers, as they constitute the majority of the organisational workforce and are a key component to remaining relevant and competitive (Van Laar et al., 2017). This decision is in line with the goal of testing the hypotheses and understanding the impact of leadership approaches on individual creativity in hybrid work environments.

According to Shujahat et al. (2019) and Iazzolino et al. (2017) knowledge work refers to the category of intellectual and cognitive tasks involving the generation and application of information. Titles of knowledge workers include analysts, engineers, programmers, designers, and managers. Recognising the need for creativity in all industries for the future success and survival of organisations, the population sample was chosen to represent a diverse range of industries (Anderson et al., 2014; Lee et al., 2020; Maisiri et al., 2019). This was to ensure that the findings of the study were broadly applicable across various organisational contexts.

The research specifically targeted knowledge workers who were engaged in hybrid working environments. This criterion was essential, as the study explored the relationship between E-WL and creativity in the context of hybrid work environments, as well as the role of IL in the same environments. By focusing on knowledge workers in hybrid work settings, the research provided insights and recommendations that are relevant to organisations navigating the challenges of this dynamic work landscape.

4.3.2. Unit of analysis

Knowledge workers in hybrid work environments were the unit of analysis. This research was intended to interpret the E-WL behaviours of knowledge worker leaders, using the same self-administered questionnaire to test their own creativity and their perceptions of their managers. Since the study focused on the perceptions of individuals, it utilised an individual-level approach and did not take perceptions on a team or organisational level into consideration.

4.3.3. Sampling method and size

Since this study was cross-sectional in nature, due on the limited time available, a non-probability sampling approach was adopted, as it was not possible to ascertain the total population of knowledge workers of E-WL in hybrid work environments in South Africa. According to Davenport (2005), it is not possible to determine how many knowledge workers there are in a specific country, given the various titles that knowledge workers fall under. Bell et al. (2019), Nqumba and Scheepers (2023) and Saunders and Lewis (2018) note that non-probability sampling excludes the possibility of acquiring a list of the total intended population in order to make a random selection. Furthermore, Bell et al. (2019) points out that it can be time-consuming and costly to secure a probability sample, since it is often resource intensive.

According to Saunders and Lewis (2018), purposive sampling is the most common technique of non-probability sampling and involves carrying out the researcher's

decision in selecting individuals that will be the most appropriate in achieving the research objective and will also allow for logical generalisations. The purposive sampling technique that was adopted for this study is the heterogenous purposive sampling variety, as it is assumed that the sample will have various characteristics and provide maximum variation (Saunders & Lewis, 2018). Therefore, knowledge workers exposed to hybrid work in different industries and demographics made up the sample for this research project.

A heuristic approach was adopted in determining the sample size. According to Lakens (2022), this approach is used in quantitative research when the researcher is unable to justify the sample size and therefore uses a general range, as given in existing literature. Therefore, similar studies used an approximate sample of at least 200 respondents (Oc et al., 2023). This research aimed for a minimum of 200 respondents and achieved a total of 268 respondents.

4.4. Measurement instrument

The aim of this research was to assess well-established constructs that were derived from prior theoretical studies, aligning with the positivist research philosophy (Saunders and Lewis, 2018). It therefore drew on the core constructs displayed by Charalampous (2023), Carmeli et al. (2010) and Zhou & George (2001) that represent, E-WL, IL and creativity, respectively. No permission was required from the original authors, as the scales were included in their published articles. Research on leadership and its relationship with creativity largely adopts the use of a questionnaire as the measurement instrument (Koh et al., 2018; Lee et al., 2020; Mumford et al., 2023). Therefore, the measurement instrument for this research was a survey in the form of a questionnaire, as it is the most common method of collecting data in qualitative research (Saunders and Lewis, 2018).

The survey was designed in Google Forms and the aesthetic of the survey was changed to orange to make it appealing to the respondents. The colour orange was chosen as it is related to and representative of creativity (Mindbodygreen, 2023). Bell et al. (2019) advise that surveys should be configured into an attractive layout as this may increase the response rate. The survey comprised questions that aimed at

obtaining comprehensive information that tested the proposed hypotheses and answered the research questions. The researcher was cognisant of keeping the questionnaire as short as possible to avoid fatigue and high respondent time (Jebb et al. 2021).

The questionnaire consisted of seven sections (see Appendix A):

Section 1: Overview of the research;

Section 2: Demographics;

Section 3: Hybrid Electronic-Work environment;

Section 4: Electronic-Work Life (E-WL);

Section 5: Creativity;

Section 6: Inclusive Leadership (IL);

Section 7: Optional thoughts on Hybrid Electronic-Work, Creativity, and IL.

These sections were combined to form one reflective scale survey that elicited data on the respondent's hybrid work circumstance, their perceptions of their own creativity and their perceptions about their leader. In total, the survey consisted of 52 questions, including the demographics, questions per construct and the optional question at the end. There were 51 compulsory questions and unless these were completed the survey could not be submitted. Each construct was on a separate page and the numbers started from 1 again for each construct. This was done intentionally, so that the respondents did not see a large number, which could cause them to become disengaged when answering. The section numbers were also displayed on the top of each section to show the survey progress as the questions were answered.

Section 1 of the questionnaire introduced the research by providing a concise overview of the research, emphasised the importance of anonymity and confidentiality and giving the timeframe for completing the survey. The rights of respondents and their option to withdraw from the research at any time without consequence were also explained. Sections 2 and 3 displayed a list-type survey that included the demographics mentioned (see section 4.4.1.). Sections 4, 5 and 6 took the form of a rating-type questionnaire, as the intention was to obtain the respondent's perceptions and opinions and are explained in detail in sections 4.4.2.

– 4.4.4. (Saunders & Lewis, 2018; Saunders & Lewis, 2016). A five-point scale was adopted, as existing key articles in the leadership domain make use of a five-point scale (Bogilović et al., 2017; Koh et al., 2018; Nqumba & Scheepers, 2023). The section covering creativity also made use of a five-point scale, with E-WL and IL being a 5-point Likert scale. See Table 4.3. for sample questions for each scale. The following table displays the question examples of the employed scales based on the chosen constructs:

Section 1: E-Work Life (Charalampous, 2023)	
	Question examples
Organisational trust	"I trust my organisation to provide good e-working facilities to allow me to e-work effectively" and "When I am not visible e-working remotely, my manager trusts me to work effectively"
Flexibility	"There are no constraints on the location where I work providing I complete my role effectively" and "I work flexible hours across the day breaking down my hours to suit my work and non-work commitments"
Work–life interference	"When e-working from home I do know when to switch off so that I can recuperate effectively" and "My relationships suffer when I am e-working remotely"
Productivity	"If I am interrupted when working from home I still meet my manager's quality expectations" and "I can cope with work demands more effectively when I e-work remotely"
Section 2: Creativity (Zhou & George, 2001)	
	Question examples
	"I suggest new ways to achieve goals or objectives"; "I come up with new and practical ideas to improve performance"; "I am not afraid to take risks" and "I promote and champion ideas to others"
Section 3: Inclusive Leadership (Carmeli et al., 2010)	
	Question examples

Openness	"My manager is open to hearing new ideas" and "My manager is attentive to new opportunities to improve work processes"
Availability	"My manager is available for consultation on problems" and "My manager is an ongoing 'presence' in this team and someone who is readily available"
Accessibility	"My manager encourages me to access him/her on emerging issues" and "My manager is accessible for discussing emerging problems"

Table 4.4: Example questions
Source: Researcher's composition

4.4.1. Demographics

According to Amabile (1996b), metrics such as gender, age and education level are essential to creativity research as specifically age and education level can reflect relevant work experience and expertise. The hybrid electronic-work environment section was adapted from the initial study focusing on individual e-working practices (Grant et al., 2011) Grant et al. (2011) describe that the duration in years and how often an individual works remotely is important to explore the working environment. Furthermore, Michinov et al. (2022) note that age, gender, number of children, work-from-home experience and duration can all influence an e-worker's performance. Similarly, Costa et al. (2022; 2023) note that care, meaning the number of children or relatives that one takes care of at home has an impact on work-family balance, which, in turn, affects creative output. This researcher chose to focus on the common demographic options based on these articles, being the number of children.

Therefore, to ensure comprehensive data collection, the questionnaire incorporated relevant questions. According to Adams et al. (2020), inclusive leadership takes into account without discrimination an individual's age, ethnicity and gender, and those are particularly important in the South African context. Therefore, ethnicity options were adopted from the latest census report, including the industries in South Africa (StatsSA, 2017).

4.4.2. Electronic-Work Life

Referring to Table 2.3., this research employed the latest version of the scale for E-WL. This was a five-point Likert scale, ranging from 1, *"strongly disagree"* to 5, *"strongly agree"* (Charalampous, 2023).

4.4.3. Creativity

This scale utilised a five-point scale ranging from 1, *"not at all characteristic"* to 5, *"very characteristic"*. Hughes et al. (2018) note that this scale is the most commonly used to self-assess creativity. Because the unit of analysis was at the individual level, it made sense to personalise the scale and make it consistent with other scales. This made it easier for the respondent to read and respond. Therefore, "I" was added to the beginning of each statement, e.g., "*Suggests new ways to achieve goals or objectives*" was changed to "*I suggest new ways to achieve goals or objectives*" (Zhou & George, 2001). This same scale was used to test creativity during the COVID-19 pandemic and was also adapted to include remote working caused by the pandemic (Costa et al., 2023).

4.4.4. Inclusive leadership

This scale utilised a five-point Likert scale ranging from 1: "strongly disagree" to 5: "strongly agree" (Carmeli et al., 2010).

4.5. Pilot testing

After ethical approval for the research was obtained from the Gordon Institute of Business Science, a pilot survey was sent via WhatsApp, using a Google Forms link, to thirteen respondents in the researcher's personal network that fitted the target population. This was done to establish the appropriateness of the survey and to request feedback on the respondents' understanding of the sections, which included the overview of the research and the survey questions. The respondents were told to check for clarity, spelling and grammar and to measure approximately how long it took for them to complete the survey. The response rate for the pilot study was 100%.

Once the pilot testing was concluded, the feedback was incorporated into the final survey. The pilot respondents reported changing "under 25" in *Section 2: Demographics (Age)* to "*18-25*", and rephasing the first question in *Section 3: Hybrid electronic-work environment*, from "*Approximately, how often do you work from home or any other location besides the office?*" to "*Approximately, how often do you work from home as opposed to the office?*"*.* The pilot respondents also noted that the remaining questions were easy to understand and read, the values on the scale were easy to follow and the timing of ten minutes for completion was correct.

Pilot respondents also suggested that the researcher add an open-ended question to get a perception of hybrid e-work, creativity and IL. An optional question was added at the end of the survey as Section 7. The question added to read *"Would you like to add anything further to the research regarding your thoughts on hybrid e-work, creativity, and inclusive leadership? (Optional)"*. These responses aided the discussion in Chapter 6 of this research.

Creswell and Creswell (2018) note that pilot testing is an important step in research as it is used to ascertain content validity and provide an initial evaluation of the internal consistency of the scale. Cronbach alpha values were determined based on the thirteen responses, using the research constructs. This was done as different scales for each construct were combined into one questionnaire for the purpose of this study. Cronbach alpha values typically ranged between 0 and 1, with optimal values greater than 0.7 (Creswell and Creswell, 2018).

Table 4.5. indicates the Cronbach alpha values for the thirteen responses:

Construct	Cronbach alpha	Reliability
E-Work Life (20 items)		
Organisational trust	0.724	Excellent
Flexibility	0.863	Excellent
Work-life Interference	0.772	Excellent
Productivity	0.896	Excellent

Construct	Cronbach alpha	Reliability
Creativity (13 items)		
Creativity	0.979	Excellent
Inclusive Leadership (9 items)		
Inclusive Leadership	0.987	Excellent

Table 4.5: Pilot testing Cronbach alpha values

Source: Researcher's composition

4.6. Data gathering process

As stated in Section 4.3, a non-probability, purposive sampling method was adopted in this research. The researcher made use of the current networks available. These included a cohort of Masters in Business Administration (MBA) candidates at GIBS, email, as well as the researcher's private social media networks: LinkedIn, Facebook, Instagram, and WhatsApp. After ethical clearance was granted and pilot testing was concluded, the survey was distributed to the researcher's contact list and friends and followers on social media. This amounted to over 1300 potential participants, of whom 268 responded, giving an average survey response rate of 20.6%.

The researcher included a requirement that the survey should only be filled in if the participant worked in a hybrid environment. A screening question to this effect was added to the survey, and this eliminated 64 responses, giving a final total of 204 responses to be analysed. Sending out the survey to this number of respondents allowed for a quick, reliable collection of an appropriate sample size.

The survey was sent out for pilot testing on the same day that ethical clearance was received (14 August 2023). Minor changes were made on the same day, and the survey was sent out and posted on social media channels for actual responses over a period of four days: two days at the beginning of the data gathering process (14-16 September 2023) and two weeks later (29-30 September 2023), when the responses slowed down. The survey was closed four weeks after the first survey link was sent out (11 September 2023). Hair et al. (2019) note that it is beneficial to send out reminders to potential participants, as this helps to get quicker responses. The

researcher did not see a need to send out reminders, as the number of responses grew steadily during the four-week process, and the target of a minimum of 200 responses seemed achievable. Subsequently, 268 responses were received and exported from Google Forms into a Microsoft Excel document to be analysed.

4.7. Data cleaning, editing and coding

Once the survey was closed and the responses were downloaded in Microsoft Excel from Google Forms, the IBM Statistical Package for the Social Sciences (SPSS) statistical software Version 28 was used to analyse the data (Saunders & Lewis, 2018; Zikmund et al., 2019). According to, Bell et al. (2019) and Saunders & Lewis (2018), coding the data is of utmost significance before analysing it, as it is a crucial part of the data analysis process.

After the raw data was collected, it needed to be cleaned and changed to a numerical format (Bell et al., 2019). Google Forms already contained embedded universal coding rules, therefore the researcher only needed to check that the responses were exported correctly. The survey did not have any incomplete responses as it was designed with compulsory questions that had to be answered in order to submit the survey. The last question was optional and was placed as an add-on to the survey, so if the respondents did not fill it in, there was no effect on the data or analysis of the results.

Zikmund et al. (2019) note that screening questions in a survey is beneficial to the research as it allows responses to be representative of the target population. Therefore, the researcher added a question to the survey to ensure that the respondents were representative of the intended population. It entailed a "*never*" option to the question: Approximately, how often do you work from home as opposed to the office? There were 64 respondents who selected 'never' and therefore were excluded from the sample, leaving a total of 204 responses to be analysed.

According to Zikmund et al. (2019), data coding involves assigning numbers to the data so as to sort the responses into categories. In this study, the codes were based on the constructs being investigated and the scales that were adopted. One item, specifically item 15 in the work-life interference dimension, had to be reverse-coded,

as per the original scale (Charalampous, 2023).

Construct	Construct code
E-WL	EWL
Organisational trust	ORG_TRUST
Flexibility	FLEXIBILITY
Work–life interference	WORKLIFE_INTERFERENCE
Productivity	PRODUCTIVITY
Creativity	CREATIVITY
IL	IL

Table 4.6: Codes for each construct

Source: Researcher's composition

The data was coded further using the scale descriptors used in this study. The following table indicates the scale anchors and the codes used for each construct:

E-WL	Likert scale descriptor
1	Strongly disagree
2	Disagree
3	Neither agree/disagree
4	Agree
5	Strongly agree

Creativity	Scale descriptor
1	Not at all characteristic
2	Not very characteristic
3	Neutral
4	Somewhat characteristic
5	Very characteristic

IL	Likert scale descriptor
1	Strongly disagree
2	Disagree
3	Neither agree/disagree
4	Agree
5	Strongly agree

Table 4.7: Scale anchors for each construct drawn from the established scales

Source: Researcher's composition

In addition, this research controlled for the hybrid e-work environment in days, as seen in the theoretical model (Figure 4.8.). Being part of the descriptive statistics and non-metric, it needed to be dummy coded (coded 0-1) to ensure that the data can be represented and used for analysis (Hair et al., 2019).
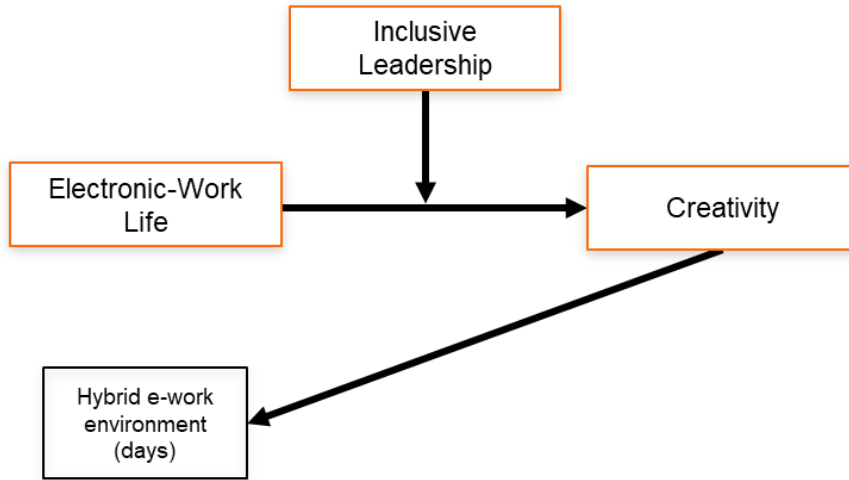
Figure 4.8: Theoretical model
Source: Researcher's representation introducing the control

Table 4.7. represents the dummy codes used for Section 3 of 7 of the questionnaire. The meanings of low, intermediate and high hybrid work are defined in Chapter 2: Literature review.

	Intermediate	High
Low	0	0
Intermediate	1	0
High	0	1

Table 4.7: Dummy codes for the control
Source: Researcher's representation

4.8. Approach to data analysis

The SPSS software used the coded data of the variables to produce iterations, evaluate goodness-of-fit indices, and determine standardised paths (Hoe, 2008). The purpose was to demonstrate the complex nature of the hypothesised relationships. As the research was descriptive and correlational in nature, testing the hypotheses highlighted the interrelationships and variability between E-WL, creativity, and IL in hybrid work environments (Saunders & Lewis, 2018).

This research had two primary objectives, relating to finding answers to the research questions. Firstly, it sought to investigate the relationships between E-WL and creativity, E-WL and IL, and IL and creativity, with the aim of testing how positive these relationships are.

Secondly, this research sought to investigate the role of IL in these relationships. In this study, E-WL was considered to be an independent latent variable (exogenous) as it was believed to have a relationship with the dependent latent variable (endogenous), which, in this case, was creativity (Saunders et al., 2016). IL was introduced and tested as a moderator in this relationship. Considering the relevance of hybrid work environments in this research, is it included as a contextual factor influencing the responses on the three constructs, depicted in this research as the path model.

Table 4.9. is a summary of the steps and tests taken to analyse the data. The quality assurance and regression analysis sections will be expanded in 4.9 and 4.10.

Data Analysis	Steps and tests
Data cleaning, editing and coding and descriptive analysis	
Microsoft Excel	Correct export from Google Forms Data preparation, coding
Analysis Approach	
Descriptive statistics	Frequency tables, graphs
Quality assurance	
Reliability	Cronbach Alpha
Validity	Pearson correlation Factor analysis (Kaiser–Meyer–Olkin, Bartlett's test)
Normality	Histogram Quantile-Quantile Plots Kolmogorov-Smirnov, Shapiro-Wilk
Hypothesis testing	
Relationships	Correlation, linear regression, hierarchical regression
Moderation	Hierarchical regression

Table 4.9: Steps and tests taken for the data analysis

Source: Researcher's composition

4.8.1. Descriptive statistics

Bell et al. (2019) note that frequency tables and graphs are a common way to display data in quantitative studies. Therefore, this research has adopted this approach to display the univariate analyses of the descriptive statistics. The mean and standard deviation compared to the entire sample were used as the preliminary tests of this research as it is used to describe the characteristics of the target population (Zikmund et al., 2019).

Using the reduced sample of 204 respondents, Section 2 of 7 entailed the questions used for the descriptive statistics part of this research. These questions contained in this section were of a categorical nominal nature as the numbers assigned to them in the analysis have no relevance to the number order (Saunders & Lewis, 2018).

4.9. Quality assurance

The comprehensive evaluation of the final questionnaire was executed via two pivotal statistical techniques, which served a dual purpose. Firstly, an assessment for internal consistency was conducted using Cronbach's alpha, aimed at ascertaining the whether the variables are reliable. Concurrently, Kaiser–Meyer–Olkin test and factor analysis was employed to authenticate the validity of the instruments used I this research (Hair et al., 2019; Zikmund et al., 2019). To provide strong foundation for subsequent parametric analyses, all variables in the study were tested for normality (Saunders & Lewis, 2018). Further parametric procedures only began after the assumptions associated with a normal distribution were validated (Zikmund et al., 2019). These decisions are outlined in Table 4.7: steps and tests taken for data analysis.

4.9.1. Reliability

Hair et al. (2019) note that reliability is the level of consistency exhibited by a variable or set of variables in terms of its measurement. In the event that multiple measurements are conducted, they will also exhibit consistency in value if they are reliable variables. Reliability is different from validity in the sense that it doesn't concern what needs to be measured, but rather by what means it is measured (Hair et al., 2019). Similarly, Creswell and Creswell (2018) notes reliability as the consistency and repeatability of a measurement instrument. Therefore, instruments with multiple items need to be tested for internal consistency so that it can be repeated by researchers in the future, be applied in another context to produce similar consistencies, and to eliminate errors and biases (Saunders & Lewis, 2018); doing so is paramount in contributing to any body of knowledge (Saunders & Lewis, 2018).

To address potential subject error in this research, a proactive and targeted approach was adopted, in line with the recommended guidelines (Saunders & Lewis, 2018; Creswell & Creswell, 2018; Hair et al. 2019). Questionnaires were distributed to respondents working in specific hybrid work environments, thereby mitigating the risk of subject error (Saunders & Lewis, 2018). Subsequently, the implementation of the Cronbach's alpha is essential in assuring the internal consistency, as well as the

reliability of the collected data and the measurements used to collect them (Creswell & Creswell, 2018). According to Creswell and Creswell (2018) Cronbach's alpha values produce values between 0 and 1. However, Hair et al. (2019) notes that a minimum of 0.70 is acceptable and therefore this research has adhered to the guideline. Ultimately, maintaining careful attention to detail and adherence to these guidelines is vital to generating conclusive and trustworthy findings (Saunders & Lewis, 2018)

4.9.2. Validity

Saunders and Lewis (2018) note that research can be considered credible and valid if the outcomes are congruent with the intended objectives of the research. Zikmund et al., (2019) points out that construct validity gauges the accuracy with which a measurement depicts the concept. Consequently, Hair et al. (2019) notes that the validity of the research refers to the measure (questionnaire) accurately measuring what it is intended to measure. Therefore, it is important that validity is considered in the research design as if there is anything that compromises the validity of the research be removed (Saunders & Lewis, 2018).

Both sample and construct validity are important to ascertain whether the results can be generalisable to an entire population (Saunders & Lewis, 2018). Therefore, validity needs to be checked to see if the measurement is designed to test the hypothesis, in context, and aligned with the aim of the study. Construct validity can be measured through two concepts: convergent and discriminate validity (Hair et al. 2019). Convergence validity is employed to ascertain whether a string correlation exists between the variables within a particular construct, and if indeed they serve as measures of that construct. This assessment is conducted by measuring the average of the correlation loadings for the inter-construct variables, which should surpass the loadings of the inter-construct variable itself to be deemed valid (Hair et al. 2019, Zikmund et al., 2019). On the other hand, discriminate validity is the opposite of convergence validity in the sense that its variables display a weak correlation (Hair et al. 2019, Zikmund et al., 2019).

Russel (n.d.) dedicates attention to the correlation among questions and measures within a construct in research, and notes that if questions are precisely related to a similar construct and the statements measure an identical variable, the respondents' scores should, theoretically, be fairly similar across all corresponding questions. Furthermore, using the average, a Pearson Correlation test was employed to assess the correlations among the variables within the same construct. According to Zikmund et al., (2019), a Pearson Correlation is used ascertain the validity of the constructs as it is the most common test used to determine this. For a more in-depth assurance, factor analysis was brought into this research.

4.9.3. Exploratory Factor Analysis (EFA)

Zikmund et al. (2019) asserts that factor analysis is usually employed to examine the multidimensionality of the variables and describe the interdependency by reducing the number of factors from a large number so that it could be worked with. Hair et al. (2019) notes that there are two types of factor analysis, namely Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA) This research employed EFA as the researcher was unsure of the number of factors that exist from the data (Zikmund et al., 2019), especially using the scales in the South African context. EFA is commonly used in research that has more than two variables to determine model fit, which is seen in this research (Hair et al., 2019). Moreover, (Hair et al., 2019) notes that a necessity of EFA is that there should be no cross-loading between the variables and will be discussed further in Chapter 5.

Furthermore, prior to the EFA, a principal component analysis was employed to provide a full view of the interrelationships and multicollinearity between the variables. This encompassed the checking the Kaiser-Meyer-Olkin (KMO) measure and the Barlett's test of sphericity (Hair et al., 2019). These were conducted and will also be presented in Chapter 5. The KMO measure tests the fit of the sample size and the required KMO value needs to be above 0.5 as a benchmark (Hair et al., 2019). The Bartlett's test of sphericity is another test to ascertain the suitability of the EFA and tests if the correlations among the variables exist. The p-value in the Bartlett's test must be significant (< 0.05) with a confidence level of 95%, meaning that the sample is adequate for factor analysis (Hair et al., 2019).

4.9.4. Normality

To test for normality of the data, this research employed histograms and Quantile-Quantile plots to effectively portraying any patterns within the data these methods are commonly used for ratio/interval data to test for normality (Bell et al., 2019). Furthermore, the Kolmogorov-Smirnov and Shapiro-Wilk tests were employed and will be discussed further in section 4.10.1.

4.10. Data analysis

4.10.1. Linear regression

In order to test research question one and fulfil the assumptions of the hierarchical regression needed for both research questions, a simple linear regression analysis was performed. According to Fein et al. (2022), there are four assumptions that need to be adhered to: (1) it is necessary that two variables (the independent and dependent variables) be measured on a continuous scale, (2) it is important to ascertain a linear association between the two variables, which can be assessed through the use of a scatterplot (see appendix C), (3) the presence of any outliers should be avoided and (4) the variables ought to exhibit a normal or approximate distribution.

4.10.2. Correlation

This research adopted a correlation analysis for the purpose of testing the relationship between the independent constructs and the dependent construct, being creativity. Wegner (2021) notes that a correlation analysis is used to measure the strength of relationship between two numeric variables. A correlation coefficient is determined by a value in between -1 and +1 (Wegner, 2021). Furthermore, if the correlation coefficient displays a "*", this shows a significant correlation. Figure 4.10. is a depiction of correlation value meanings.

Figure 4.10: Correlation coefficient values

Source: Hair et al. (2006)

According to Fein et al. (2022) four assumptions need to be made in order for correlation testing: (1) the two variables must be measured on a continuous scale, (2) the two variables ought to exhibit a linear correlation (3) the presence of any outliers should be avoided and (4) the variables should demonstrate a normal or approximately normal distribution.

To further determine normality of the correlations the Kolmogorov-Smirnov and Shapiro-Wilk tests were adopted (Hair et al., 2019). Salcedo & McCormick (2020) note that it is imperative to recognise that these tests are not foolproof and should be utilised together with other methods for evaluating normality, such as visually inspecting histograms and Quantile-Quantile plots. Therefore, this research adopts the method of histograms and Quantile-Quantile plots. If the Shapiro-Wilks and Kolmogorov-Smirnov tests show a normal distribution, it is not ideal as it indicates a 'neutral' result. Therefore, this research looked out for a bell shape curve for the histograms and majority dots to be as close to the line on the Quantile-Quantile plots to indicate an approximately normal distribution.

4.10.3. Hierarchical regression

The methodology adopted in this research utilises the method of a hierarchical regression to investigate the relationships between the constructs. Moreover, the size and orientation of these relationships are pointed out through the Beta regression coefficient (Hair et al., 2019). Fein et al. (2022) notes that Hierarchical regression entails the utilisation of a regression model wherein the predictors are gradually incorporated in blocks. Each block denotes a distinct step or model. The order in which predictors are added to the model, or which block they are assigned to, comes from the theory. The initial block introduced in hierarchical regression may

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encompass "control variables," which are employed to maintain a constant level. Therefore, this research employed this method, and used the hybrid e-work environment in days as a control to carry out this analysis (see section 4.7).

According to Fein et al. (2022), there are seven assumptions for a hierarchical regression that need to be adhered to, and these are the same as that of a multiple regression analysis: (1) the reliant variable needs to be tested on a continuous scale, (2) there needs to be two/+ independent variables, (3) these variables ought to exhibit a linear association, (4) the data should exhibit homoscedasticity, (5) the data must not possess two/+ independent variables that are highly correlated with each other, (6) the presence of any outliers should be avoided, (7) the errors should exhibit an approximately normal distribution and can be assessed with a histogram (with a superimposed bell curve) and by plotting the standard deviations of the standardised errors using a Quantile-Quantile Plot.

Establishing the moderation method necessitates integrating inclusive leadership into the structural model that links E-WL and creativity. This research employed the same method to test moderation of the relationships. Hair et al. (2019) notes that a hierarchical regression can be used to test for the moderator effect among relationships.

4.11. Security

Ensuring the security and anonymity of the data is paramount in business research (Bell et al., 2019). As a safety measure, the data was managed in a way that it is impossible to trace it back to the company or the leader, thereby eliminating any exposure or identification risks. In addition, all data will be securely stored with a password-protected shield on Google Drive, mitigating any risks of unauthorised access and will be kept for a minimum of 5 years post this research. Measures will be reinforced to maintain reliability throughout the research process, ensuring the solidity of the findings. Most importantly, the use of Google Forms survey administration software served a dual purpose - ensuring the integrity and quality of the collected data, as well as the security thereof.

4.12. Limitations

As with any research, this research is not without limitations. The limitations of this researched is detailed below:

Longitudinal designs are often used in quantitative research (Creswell & Creswell, 2018). However, this study was intended to be cross-sectional and therefore was only expected to provide a "snapshot" of the hybrid E-WL environment in relation to creativity and the role of IL in HW environments. As creativity becomes more of a pressing issue in the future of work, individual perceptions can change. Similarly, participants are responding to the survey a considerable time after first being forced made to work from home. Therefore, as Lopez-Persem (2022) notes, the veracity of their experiences may lack accuracy and objectivity or may have changed over time, and fostering creativity may have improved or become worse than the literature suggests. Furthermore, the questionnaire is based on a self-reported measure and therefore may lead to exaggerated or underrated perceptions. Carmeli et al. (2010) notes that self-report questionnaires can sometimes lead to common method bias.

It is necessary to acknowledge that due to the concept of hybrid work being new Gratton (2021), and the complexity inherent in creativity (Amabile, 1995; Blomberg et al., 2017), the recorded outcomes may lack reliability in the sense that a significant number of the participants may not have understood these concepts fully. Leadership and creativity can be defined differently in other research, so it is clear that the respondents may understand these terms differently as well.

This became apparent when the questionnaire specifically targeted individuals who work in hybrid environments. Out of a total of 268 respondents, 64 selected that they worked 100% from the office, so they were excluded from the study. This may indicate a misinterpretation of the term 'hybrid work' in the South African context, or the researcher may have failed to include weeks instead of days. It is possible the respondents worked from home and in the office on alternating weeks, rather than strictly within a single week as the researcher had initially framed the question.

The research also failed to include survey questions regarding culture, as culture may be a backdrop to inclusive leadership behaviours, especially in South Africa (Moodley, 2022). This is in accordance with previous research which established that culture has an impact on creativity (Alblooshi et al., 2021; Blomberg et al., 2017; Lebuda & Csikszentmihalyi, 2018; Stojcic et al., 2018; Walia, 2019).

In recruiting respondents, the researcher acknowledged that the chosen data collection tool, Google Forms, requires the participant to have a Google mail account to fill out the survey, this could have hindered the reach of the study and participants could have been reluctant to link their Google mail accounts to the survey, although they were assured that their Google mail account information would not be captured. Furthermore, since the researcher employed online social platforms to distribute the questionnaire, there is no indication of the actual reach, and therefore no control over the distribution of the survey. However, this is what a snowballing technique involves; it was not the intention behind this research, which employed a non-purposive method (Saunders & Lewis, 2018).

4.13. Conclusion

This chapter presented a detailed view of the methodological design decisions made in this research. It is also outlined how various other elements of the study were dealt with such as security and the confidentiality of data. Finally, some limitations of the study are discussed. The following chapter outlines the results received from the respondents.

CHAPTER 5: RESULTS

5.1. Introduction

In presenting the findings of the research, this chapter begins by outlining the descriptive statistics required to understand the context, followed by the results of the various statistical analyses that were introduced in Chapter 4. The objective of this chapter is to unpack the constructs that were formulated and address the hypotheses outlined in Chapter 2.

Figure 5.1. presents an overview of the chapter, providing a visual account of its structure and content.
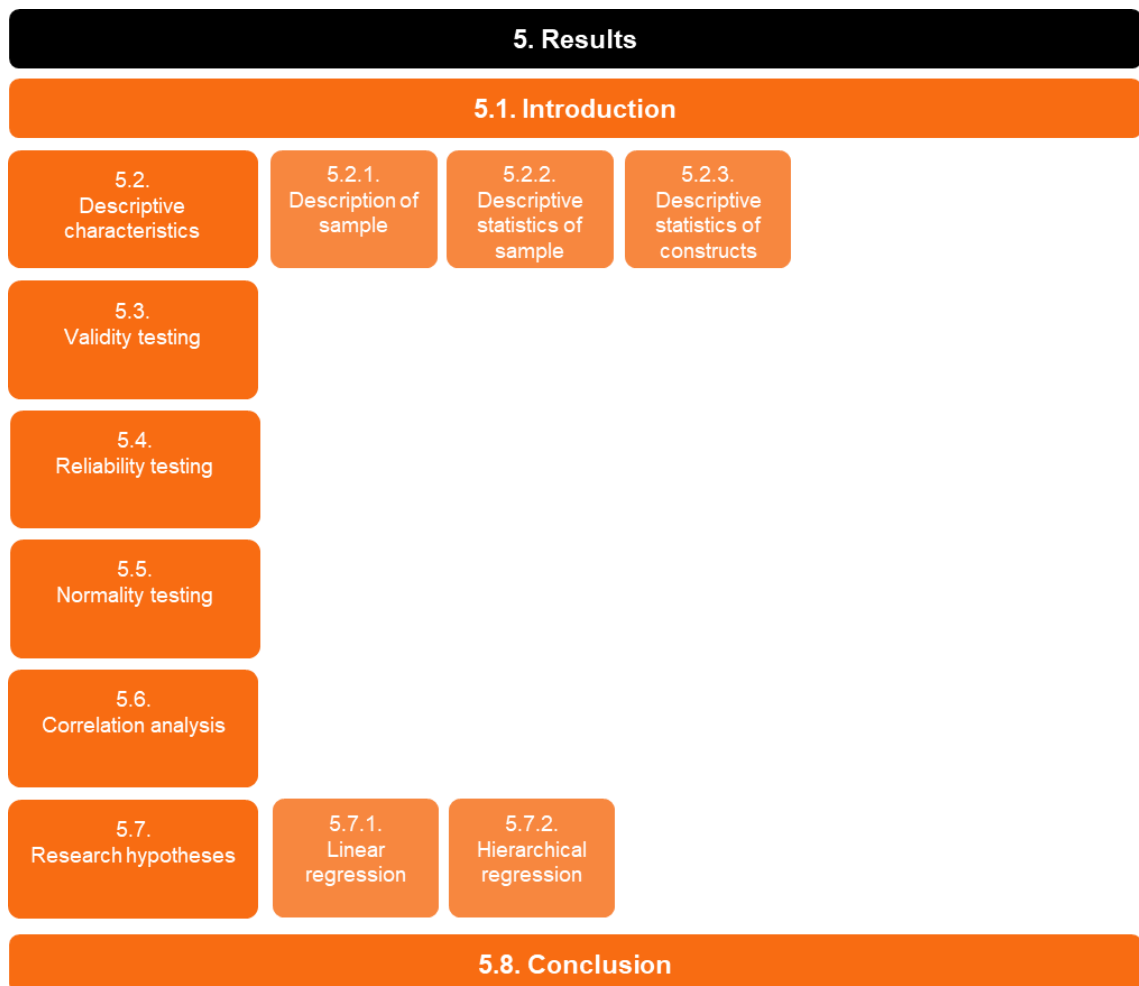
Figure 5.1: Chapter 5 - Results overview

Source: Researcher's representation

5.2.   Descriptive characteristics of the sample

5.2.1. Description of the sample obtained

Table 5.2. provides an overview of the sample obtained, emphasising the move from the initial sample to the final sample size. Initially, this research recruited a total of 268 participants, which encompassed the entire population of respondents involved in the research. During the screening phase, 24% of these respondents were screened out, resulting in a total of 204 participants in the final sample size. This screening process reflected decisions regarding how this final number was achieved and is outlined in the research methodology (section 4.7).

Description	Frequency	Percentage of Sample Obtained
Initial Sample	268	100%
Respondents screened out	64	24%
Final Sample Size	**204**	**76%**

Table 5.2: Description of sample

Source: Researcher's composition

5.2.2. Descriptive statistics of sample

These insights serve as a foundation for discussion in Chapter 6, as it facilitates an examination of potential variations in the data enabling the researcher to draw meaningful connections between the demographics and the research variables.

5.2.2.1. Age

Table 5.3. represents the age distribution of the research respondents. The most significant portion of the respondents, 60 to be exact, ranged from 35-39 years of age and represented 29% of the sample. This was followed by the more than 40 years and 30-34 years, groups that each made up 26% of the sample. A total of 21 respondents represented those aged 25-29 years, who made up 10% of the sample, and 16 respondents aged 18-25, who made up 8% of the sample.

Category	Frequency	Percentage
18-25 years	16	8%
25-29 years	21	10%
30-34 years	54	26%
35-39 years	60	29%
More than 40 years	53	26%
Total	**204**	**100.00%**

Table 5.3: Descriptive statistics - age

Source: Researcher's composition

5.2.2.2. Sex

Table 5.4. represents the sex distribution of the research respondents. A total of 142 respondents identified as female, amounting to 70% of the sample, while 61 respondents identified as male, amounting to 30% of the sample. The preference of one participant to not disclose their sex was acknowledged, accounting for 0% of the sample.

Category	Frequency	Percentage
Male	61	30%
Female	142	70%
Prefer Not to Say	1	0%
Total	**204**	**100.00%**

Table 5.4: Descriptive statistics - sex

Source: Researcher's composition

5.2.2.3. Education

Table 5.5 below represents the educational distribution of the research respondents. A total of 117 of the respondents held a bachelor's degree, representing 57% of the sample, followed by 33 respondents with a high school education, accounting for

16% of the sample and 28 respondents with Master's degrees, representing 14% of the sample. Respondents with technical college qualifications made up 12% of the sample, while one respondent held a doctoral degree, accounting for 0% of the sample.

Category	Frequency	Percentage
High school	33	16%
Technical college	25	12%
Bachelor's degree	117	57%
Master's degree	28	14%
Doctoral degree	1	0%
Total	204	100.00%

Table 5.5: Descriptive statistics - Education
Source: Researcher's composition

5.2.2.4. Ethnicity

The categories of the ethnicity were taken from the latest Census Report and represented the ethnicity distribution of the research respondents. A total of 93 respondents were Black African. and accounted for 46% of the sample, followed by 68 respondents of Indian/Asian descent, who accounted for 33% of it. A total representation of 29 respondents who identified as White made up 14% of the sample, while 12 Coloured respondents represented 6% of the sample. Two respondents fell into the 'Other' category, making up 1% of the total sample.

Category	Frequency	Percentage
Black African	93	46%
Coloured	12	6%
Indian/Asian	68	33%
White	29	14%
Other	2	1%

Total	204	100%

Table 5.6: Descriptive statistics - ethnicity

Source: Researcher's composition

5.2.2.5. Industry

The categories of the industries were also taken from the latest Census Report and represented the industry occupation distribution of the research. A large number, encompassing 109 respondents, fell into the 'Other' category, making up 53% of the sample. Respondents noted industries such as legal, medical, marketing, and fast-moving consumer goods among the category of 'Other', which was made up of 106 different responses. However, additional sectors that were reported included 'Finance, real estate & business services', of which there was respondent representation of 45, making up 22% of the sample. A total of 10 respondents noted 'Manufacturing', which contributed 5% of the sample, and 9 respondents noted 'Transport, storage & communication' making up 4% of the sample. 'General government services', and 'Personal services' made up 3% of the sample each, while 'Trade, catering & accommodation', 'Electricity, gas & water' and 'Construction' contributed 2% to the total sample each. Lastly, 'Agriculture, forestry & fishing' and 'Mining & quarrying' each made up 1% of the sample.

Category	Frequency	Percentage
Manufacturing	10	5%
Trade, catering & accommodation	4	2%
Electricity, gas & water	5	2%
Transport, storage & communication	9	4%
Finance, real estate & business services	45	22%
General government services	6	3%
Personal services	7	3%
Agriculture, forestry & fishing	2	1%

Construction	4	2%
Mining & quarrying	3	1%
Other	109	53%
Total	**204**	**100%**

Table 5.7: Descriptive statistics - industry

Source: Researcher's composition

5.2.2.6. Province

Table 5.8. table below represents the provincial distribution of the research respondents. Gauteng was notable as having the most respondents, with a total of 157, accounting for 77% of the sample, followed by 27 respondents who indicated that KwaZulu-Natal was their province of residence, contributing to 13% of the sample. Other South African provinces, such as Western Cape (5%), Eastern Cape (1%), North West (1%), Mpumalanga (1%), and Limpopo (1%), were also represented.

Category	Frequency	Percentage
Western Cape	11	5%
Eastern Cape	3	1%
KwaZulu-Natal	27	13%
North West	2	1%
Gauteng	157	77%
Mpumalanga	2	1%
Limpopo	2	1%
Total	**204**	**100%**

Table 5.8: Descriptive statistics - province

Source: Researcher's composition

5.2.2.7. Number of days worked from home as opposed to the office

Table 5.9. represents the number of days respondents worked from home, as opposed to the office. The majority of the sample (50 respondents) reported working from home two days a week and represented 25% of the sample. A total of 49 respondents indicated that they worked from home five days a week, and 48 respondents working from home three days a week, both groups making up 24% of the sample each. 31 respondents, representing 15% of the sample, reported working from home for one day a week, and represented 13% of the sample, and 26 respondents indicated working from home for four days a week. This frequency was a key factor in this research, as it also represented the control chosen for this research (see section 4.7).

Category	Frequency	Percentage
1 day a week	31	15%
2 days a week	50	25%
3 days a week	48	24%
4 days a week	26	13%
5 days a week	49	24%
Total	**204**	**100%**

Table 5.9: Descriptive statistics – Number of days worked from home as opposed to the office

Source: Researcher's composition

5.2.2.8. Number of children

The table below shows the distribution of the number of children the respondents had living with them. A total of 85 respondents reported having no children, representing 42% of the sample. Among respondents with children, 55 respondents had one child, making up 27% of the sample; 51 respondents had two children, making up 25% of the sample; and ten respondents had three children, making up 5% of the sample. Three respondents indicated having four or more children, making

up 1% of the sample.

Category	Frequency	Percentage
1 child	55	27%
2 children	51	25%
3 children	10	5%
4+ children	3	1%
No children	85	42%
Total	**204**	**100%**

Table 5.10: Descriptive statistics – number of children
Source: Researcher's composition

5.2.2.9. Experience in number of years working hybrid

Table 5.11. represents the distribution of the years of hybrid work experience the respondents had. A total of 82 respondents had three years' experience of working hybrid, representing 40% of the sample, followed by 40 respondents with two years' hybrid experience, amounting to 20% of the sample. In addition, 29 respondents reported having one year of experience, making up 14% of the sample, and 25 respondents noted having four years' experience working from home and making up 12% of the sample. On the other hand, 13 respondents had ten or more years' experience, making up 6% of the sample. The smaller percentages, 3%, 1%, 1%, and 1% were attributed to those with 5, 6, 7, and 8 years of experience, respectively.

Category	Frequency	Percentage
1 year	29	14%
2 years	40	20%
3 years	82	40%
4 years	25	12%
5 years	7	3%
6 years	2	1%

7 years	3	1%
8 years	3	1%
10+ years	13	6%
Total	**204**	**100%**

Table 5.11: Descriptive statistics – number of years' experience in working hybrid
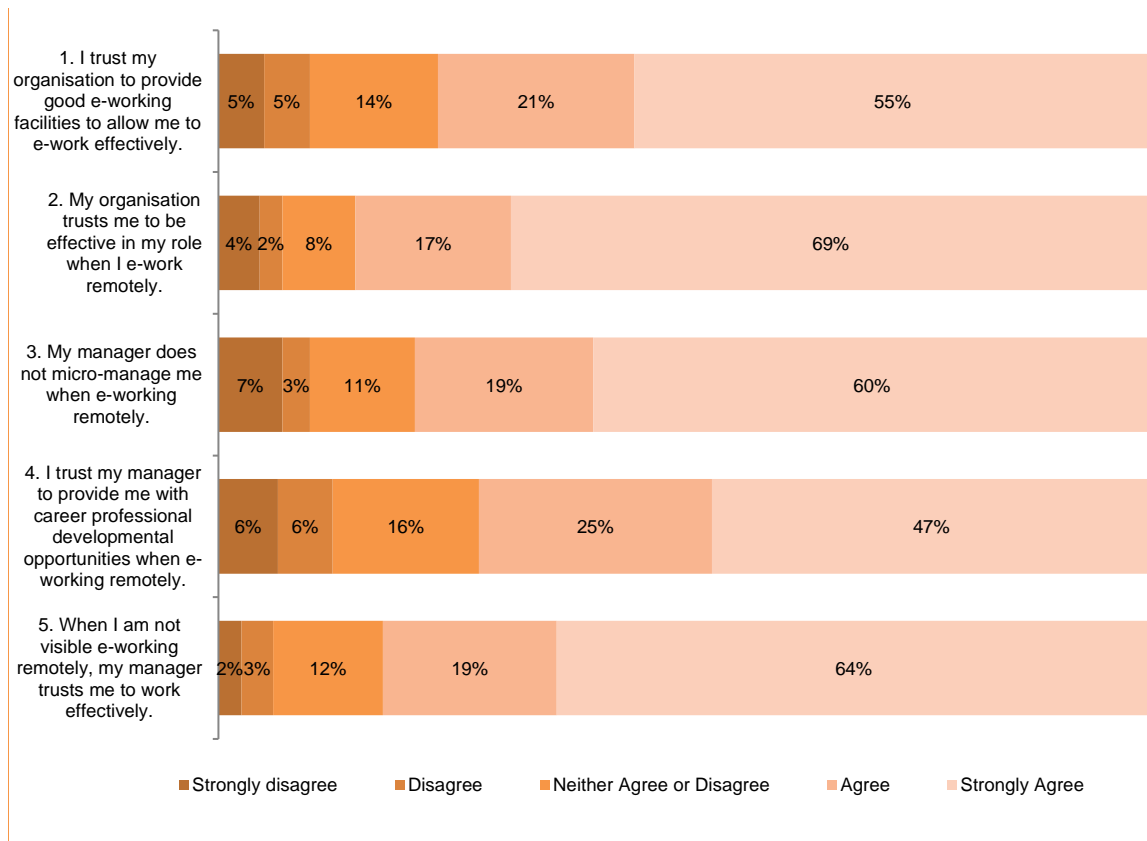Source: Researcher's composition

5.2.3. Descriptive statistics of constructs

This section provides a description and visual representation of the responses of the E-Work life construct and the four dimensions that make up E-WL, namely, organisational trust, flexibility, work-life interference, and productivity. This is followed by the other two constructs, namely, creativity and inclusive leadership.

5.2.3.1. Organisational trust

Overall, respondents reported high levels of agreement with all of the statements relating to organisational trust, depicting a move towards the 'agree' and 'strongly agree' side of the scale. Commenting on 'agree' and 'strongly agree' percentages, 76% of respondents expressed high levels of confidence in their organisations' ability to deliver effective e-working facilities. A total of 86% of the respondents believed that their organisation trusted them to be effective in their remote work roles, and a further 79% of respondents reported feeling that their managers did not micro-manage them when they were e-working remotely. However, the lowest percentage of 'Agree' and 'Strongly agree' compared to the other questions, shows that 72% of respondents trusted that their managers would provide career and professional development opportunities when they e-worked remotely.

This question also had the highest number (16%) of 'Neither Agree nor Disagree' responses, as well as the highest number (12%) of 'Disagree' and 'Strongly disagree' compared to other questions in this section. Lastly, 83% of respondents chose 'Agree' and 'Strongly Agree' as indications that their managers trusted them to perform well, even when not physically present.

Figure 5.12: Descriptive statistics of E-WL construct– organisational trust

Source: Researcher's composition

5.2.3.2. Flexibility

Overall, the respondents reported a high level of agreement with all the statements relating to flexibility. By selecting the 'Agree' and 'Strongly Agree' options, the majority of the respondents, amounting to 56%, indicated that they could easily take time off when e-working remotely; 62% indicated that their line managers allowed flexibility of hours worked as long as the work was completed; and 69% indicated that there were no constraints on their work location, provided they fulfilled their roles effectively. It is worth noting that the least 'Agree' and 'Strongly Agree' percentage, compared to the other questions in this section, was that respondents noted having flexible hour breaks to cater for their work and non-work commitments.
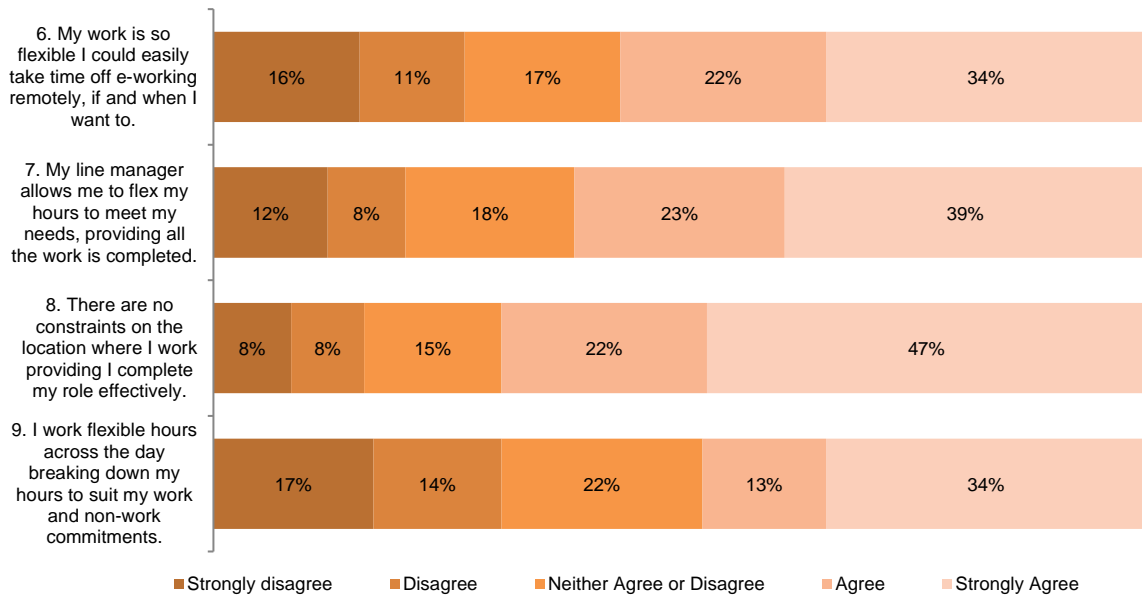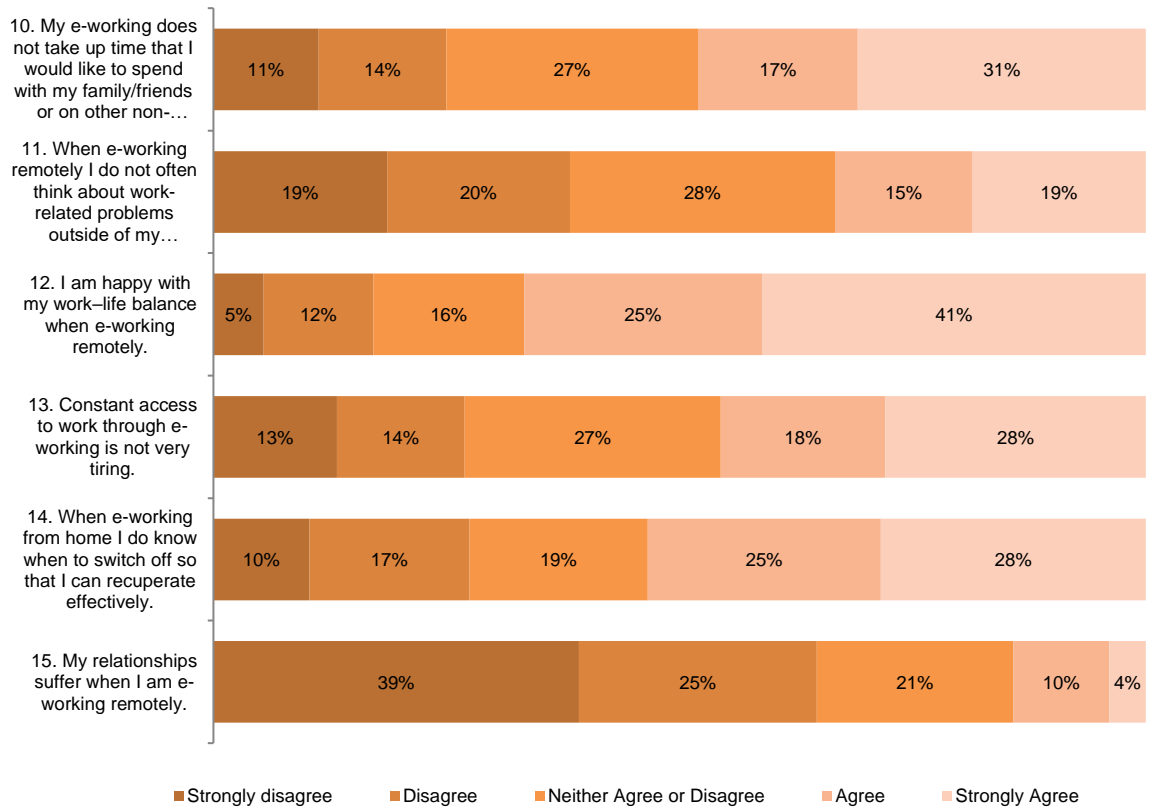
Figure 5.13: Descriptive statistics of E-WL construct– flexibility

Source: Researcher's composition

5.2.3.3. Work life interference

In general, the respondents reported positive outcomes with the work-life interference dimension. In noting the 'Agree' and 'Strongly Agree' percentages, 48% of respondents reported that e-working remotely did not take up their personal and relationship time, and a low percentage (34%) noted that they did not think about work or work-related issues outside of normal hours. A large percentage (66%) claimed that they were happy with their work-life balance when e-working remotely, and 46% of respondents selected 'Agree' or 'Strongly Agree' that constant access to work was not very tiring. Furthermore, a majority of 53% selected 'Agree' or 'Strongly Agree' with regard to knowing when to switch off and recuperate effectively while e-working from home. For the final reverse-coded question for this section, 14% of respondents selected 'Agree' or 'Strongly Agree', signifying that their relationships suffered as a result of e-working remotely.

Figure 5.14: Descriptive statistics of E-WL construct– work life interference

Source: Researcher's composition

5.2.3.4. Productivity

Respondents overall reported positive outcomes with more than 50% of respondent's reporting 'Agree' and 'Strongly Agree' on all the questions within this productivity section. A total of 48% of respondents reported that they concentrated better when e-working remotely, 52% noted that e-working mad them more productive to deliver against their key deliverables and objectives, 50% reported that their overall productivity had increased their ability to e-work remotely, 57% reported that if they were interrupted, they still met their managers' quality expectations and 53% noted that they could cope with work demands more effectively when they e-worked remotely.
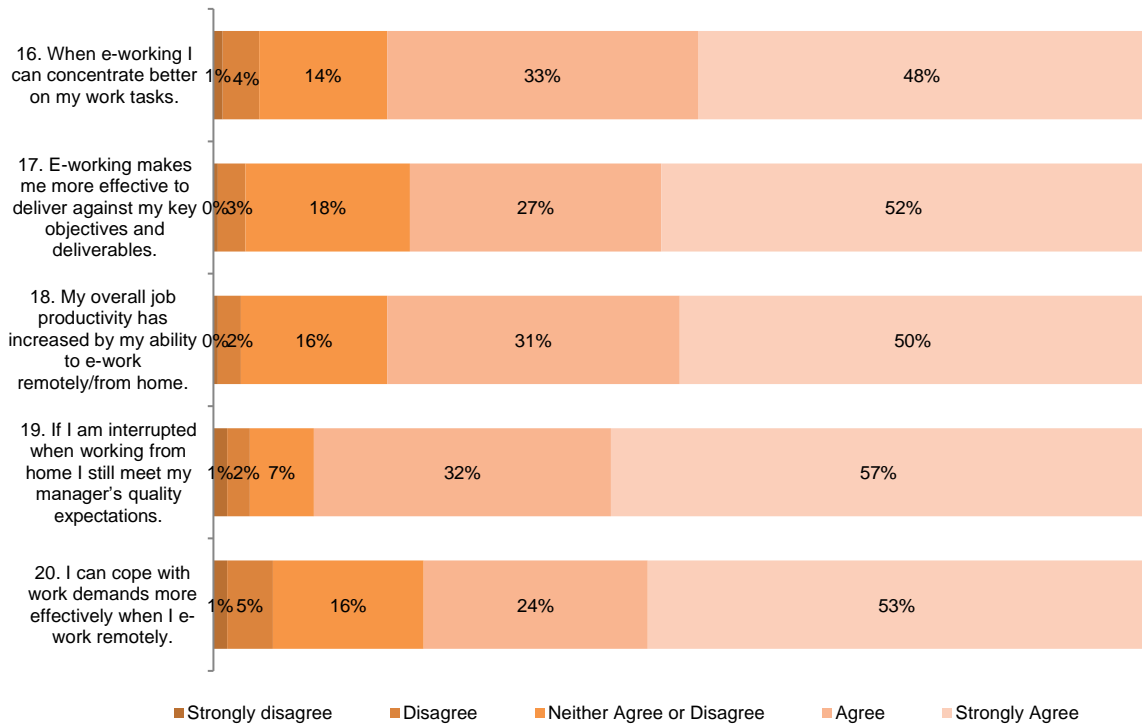
Figure 5.15: Descriptive statistics of E-WL construct– productivity

Source: Researcher's composition

5.2.3.5. Creativity

The respondents overall reported finding themselves having creative characteristics. In selecting the percentages 'Very characteristic', a total of 29% of respondents indicated that they had suggested new ways to achieve goals or objectives. A range of 35% to 37% noted that they came up with practical ideas to enhance performance, they searched out new technologies and product ideas, they suggested new ways to improve quality, they were a good source of ideas, they were not afraid to take risks, they promoted and championed the ideas to others, they planned the implementation of new ideas, they often had new and innovative ideas, they came up with creative solutions, they had a fresh approach to problems and they suggested new ways of performing work tasks. A total of 45% noted that they exhibited creativity on the job when given the opportunity to do so.
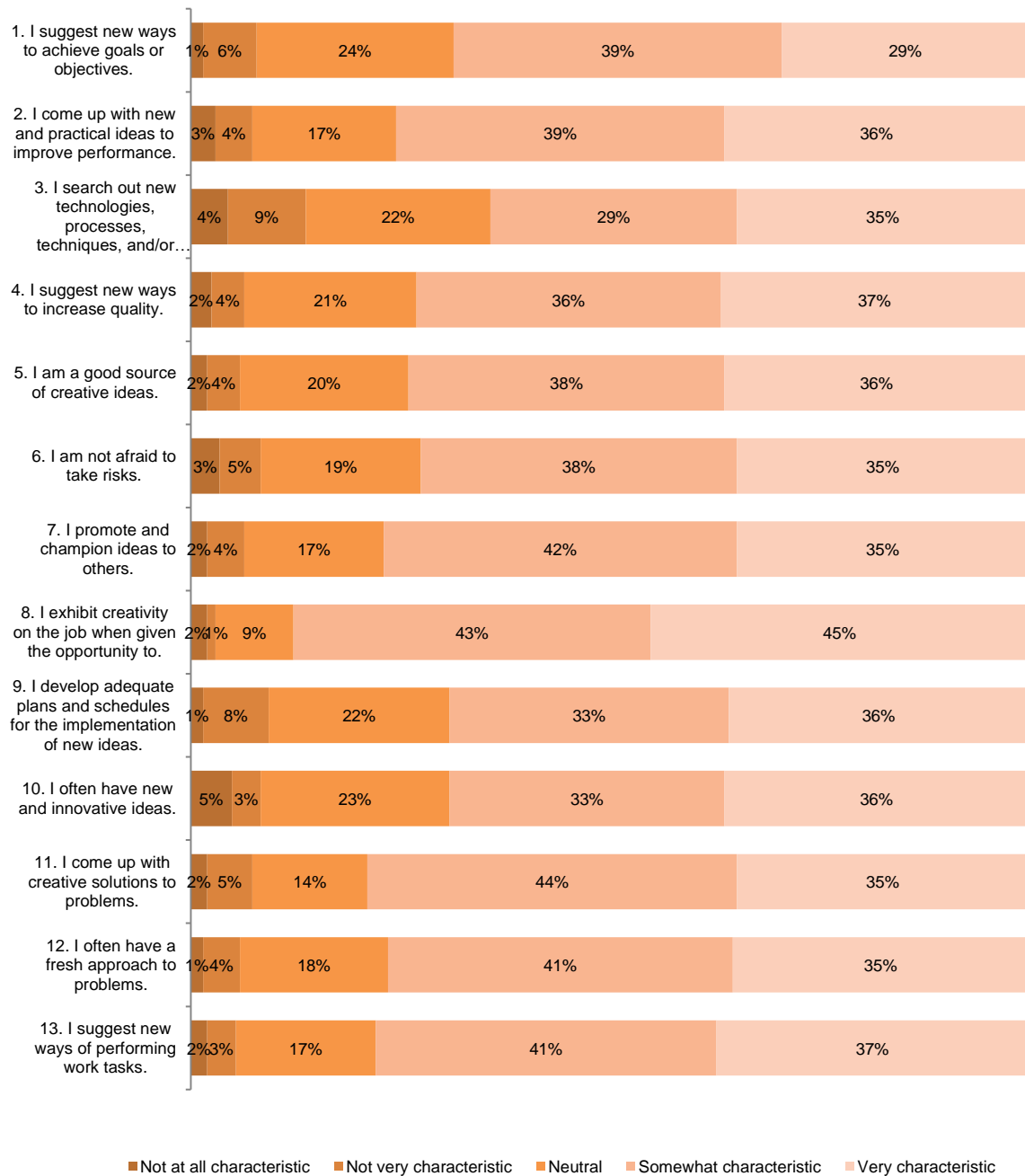
Figure 5.16: Descriptive statistics of construct– creativity

Source: Researcher's composition

5.2.3.6. Inclusive leadership

The respondents overall reported positive perceptions regarding their managers/leaders, with 45% to 47% indicating 'Strongly Agree' when it came to

various aspects of their manager's openness and accessibility. They selected the highest 'Strongly Agree' and 'Agree' to their managers being open to consultation on problems. The highest disagreements (from 8% of respondents) reported that their managers were open to hearing new ideas and were attentive to new opportunities to improve work processes respectively.
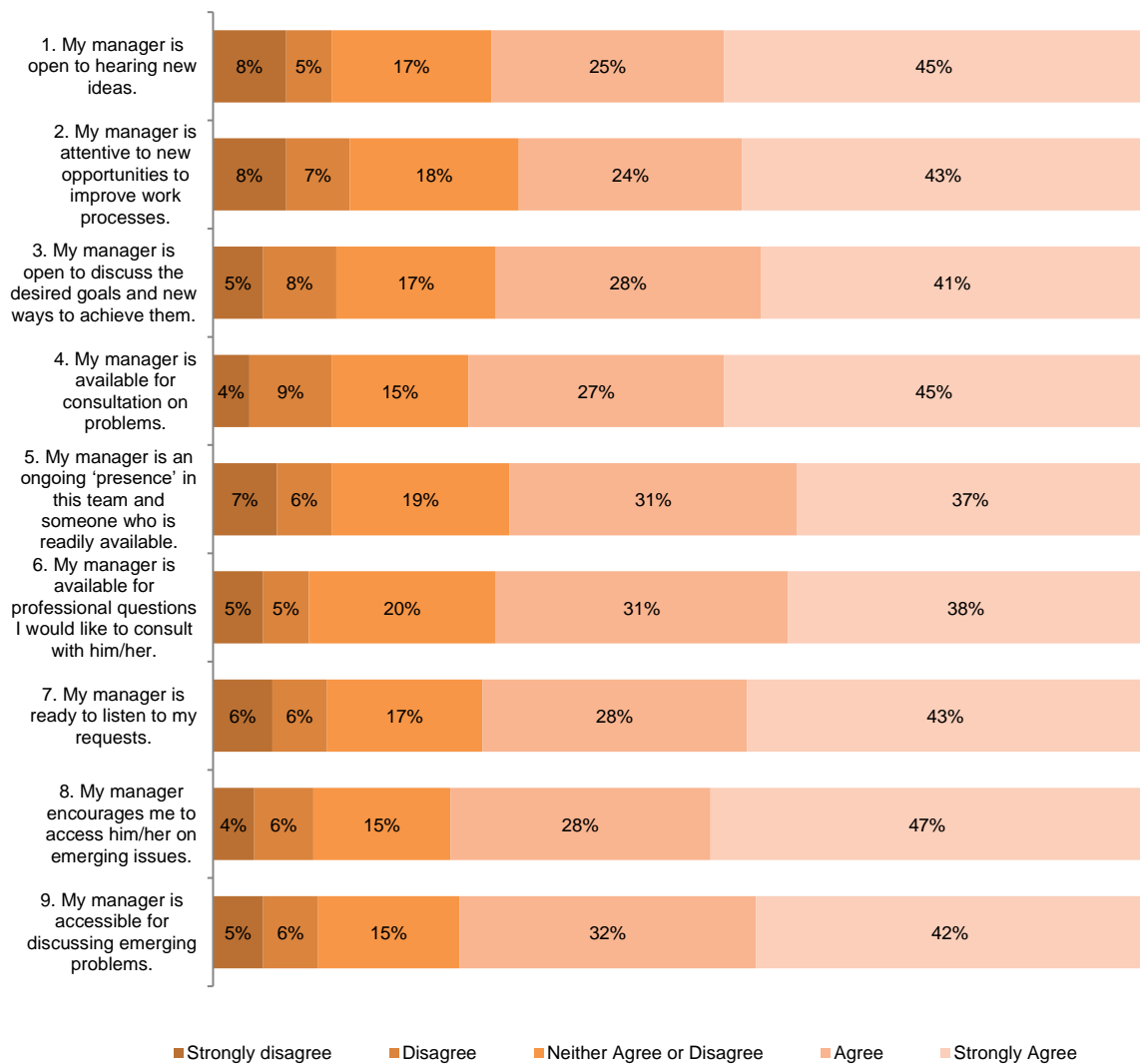
Figure 5.17: Descriptive statistics of construct– inclusive leadership
Source: Researcher's composition

5.3. Validity testing

All the KMO values pertaining to each factor were significantly higher than the recommended threshold of 0.5. This implied that the data corresponding to each factor was well-suited for factor analysis. KMO values ranging between 0.5 and 1 signify that the data is suitable for factor analysis. In this research, all factors exhibited KMO values exceeding 0.783, showing a high level of sampling validity.

The Bartlett's Test indicated that the p-values for all the constructs were all less than 0.05. This indicated good validity, as there was significant correlation between the variables within each factor. Furthermore, each factor had one factor extracted, simplifying the structure of the data. This outcome indicated that in the Exploratory Factor Analysis the factors were distinct and well-defined. In addition, the factors showed a variance ranging from 53.38% to 83.09% indicating that there was a significant portion of the variation in the data. The table below suggests that the factors this research are valid and provide a reliable representation of the underlying constructs in the data.

Construct	KMO >0.5	Bartlett's Test <0.05	Factors Extracted	Variance Explained %
Organisational Trust	0.809	0.000	1	60.486%
Flexibility	0.783	0.000	1	64.342%
Work Life Interference	0.840	0.000	1	53.383%
Productivity	0.838	0.000	1	70.746%
Creativity	0.927	0.000	1	64.817%
Inclusive Leadership	0.940	0.000	1	83.086%

Table 5.18: Validity testing

Source: Researcher's composition

5.4. Reliability testing

The Cronbach's Alpha values, which serve as indicators of internal consistency, are presented in the below table for each construct. Organisational trust, flexibility, work-life interference, productivity, and creativity all show a good to excellent level of reliability, with Cronbach's Alpha values varying from 0.815 to 0.974. These suggest

that the items within these scales measure the intended constructs.

Construct	Cronbach's Alpha	Items
Organisational Trust	0.829	5
Flexibility	0.815	4
Work Life Interference	0.823	6
Productivity	0.894	5
Creativity	0.953	13
Inclusive Leadership	0.974	9

Table 5.19: Reliability testing

Source: Researcher's composition

5.5. Normality testing

Table 5.20. and 5.21. represents the tests employed to determine if the data for each construct adhere to a normal distribution. Both tests indicate that the data deviated from a normal distribution as the p-value is less than 0.05 for all constructs. However, a visual inspection of the histograms and Quantile-Quantile plots were done (See Appendix B). The inspection reveals that the histograms show an approximate bell-shaped curve and that the majority of points in the Quantile-Quantile plots are close to the reference line, therefore suggesting an approximately normal distribution.

Construct	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Organisational Trust	0.188	204	0.000	0.835	204	0.000
Flexibility	0.110	204	0.000	0.931	204	0.000
Work Life Interference	0.068	204	0.021	0.974	204	0.001
Productivity	0.170	204	0.000	0.864	204	0.000
Creativity	0.101	204	0.000	0.928	204	0.000
Inclusive Leadership	0.163	204	0.000	0.870	204	0.000

Table 5.20: Normality testing

Source: Researcher's composition

Construct	N	Min	Max	Mean	Std Dev	Skewness		Kurtosis	
						Statistic	Std Error	Statistic	Std Error
Organisational Trust	204	1.000	5.000	4.240	0.859	-1.284	0.170	1.136	0.339
Flexibility	204	1.000	5.000	3.602	1.129	-0.461	0.170	-0.724	0.339
Work Life Interference	204	1.000	5.000	3.477	0.949	-0.242	0.170	-0.627	0.339
Productivity	204	1.400	5.000	4.285	0.750	-1.074	0.170	0.880	0.339
Creativity	204	1.077	5.000	4.003	0.781	-0.934	0.170	1.398	0.339
Inclusive Leadership	204	1.000	5.000	3.948	1.071	-1.011	0.170	0.313	0.339

Table 5.21: Normality testing

Source: Researcher's composition

5.6. Correlation analysis

Table 5.22. exhibits the correlation analysis which facilitated in ascertaining the extent of the linear relationship that exists between all the constructs. Each of the four dimensions of E-WL were discovered to have a significant relationship with creativity, as seen in the highlighted column. This proves the linearity of the independent variables with the dependent variable; thus, the constructs are all suitable to be encompassed in the hypothesis testing presented in section 5.7.

		Organisational Trust	Flexibility	Work Life Interference	Productivity	Inclusive Leadership	Creativity
Organisational Trust	Pearson Correlation	1	.474**	.327**	.319**	.583**	.296**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	204	204	204	204	204	204
Flexibility	Pearson Correlation	.474**	1	.428**	0.092	.465**	.243**
	Sig. (2-tailed)	0.000		0.000	0.192	0.000	0.000
	N	204	204	204	204	204	204
Work Life Interference	Pearson Correlation	.327**	.428**	1	.340**	.232**	.275**
	Sig. (2-tailed)	0.000	0.000		0.000	0.001	0.000
	N	204	204	204	204	204	204
Productivity	Pearson Correlation	.319**	0.092	.340**	1	.208**	.478**
	Sig. (2-tailed)	0.000	0.192	0.000		0.003	0.000
	N	204	204	204	204	204	204
Inclusive Leadership	Pearson Correlation	.583**	.465**	.232**	.208**	1	.300**
	Sig. (2-tailed)	0.000	0.000	0.001	0.003		0.000
	N	204	204	204	204	204	204
Creativity	Pearson Correlation	.296**	.243**	.275**	.478**	.300**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	204	204	204	204	204	204

Table 5.22: Correlation analysis

Source: Researcher's composition

5.7. Research hypotheses

A combination of linear and hierarchical regression was used to test the hypotheses outlined in Chapter 3.

5.7.1. Linear regression

5.7.1.1. Organisational trust

In testing the relationship between organisational trust and creativity, the R-Square value is 0.088, indicating that 8.8% of the variance in creativity can be explained by organisational trust. The F-statistic is 19.415 with the corresponding p-value of <0.001, indicating that the relationship between organisational trust and creativity is statistically significant. The beta coefficient is 0.296 and the t-statistic of the regression coefficient is 4.406 with a corresponding p-value of <0.001. Therefore, the linear regression analysis between organisational trust and creativity is supported.

5.7.1.2. Flexibility

In testing the relationship between flexibility and creativity, the R-Square value is 0.059, indicating that 5.9% of the variance in creativity can be explained by flexibility. The F-statistic is 12.683 with the corresponding p-value of <0.001, indicating that the relationship between flexibility and creativity is statistically significant. The beta coefficient is 0.243 and the t-statistic of the regression coefficient is 3.561 with a corresponding p-value of <0.001. Therefore, the linear regression analysis between flexibility and creativity is supported.

5.7.1.3. Work life interference

In testing the relationship between work life interference and creativity, the R-Square value is 0.079, indicating that 7.9% of the variance in creativity can be explained by work life interference. The F-statistic is 17.355 with the corresponding p-value of <0.001, indicating that the relationship between work life interference and creativity is statistically significant. The beta coefficient is 0.281 and the t-statistic of the regression coefficient is 4.166 with a corresponding p-value of <0.001. Therefore, the linear regression analysis between work life interference and creativity is supported.

5.7.1.4. Productivity

In testing the relationship between productivity and creativity, the R-Square value is 0.079, indicating that 7.9% of the variance in creativity can be explained by productivity. The F-statistic is 17.355 with the corresponding p-value of <0.001, indicating that the relationship between productivity and creativity is statistically significant. The beta coefficient is 0.281 and the t-statistic of the regression coefficient is 4.166 with a corresponding p-value of <0.001. Therefore, the linear regression analysis between productivity and creativity is supported.

Table 5.23. and 5.24. is an overview of linear regression results.

Linear Regression	Regression			Model Fit		
	Beta	t-statistic	p-value	R-square	F-statistic	p-value
Organisational Trust	0.296	4.406	< 0.001	0.088	19.415	< 0.001
Flexibility	0.243	3.561	< 0.001	0.059	12.683	< 0.001
Work Life Interference	0.281	4.166	< 0.001	0.079	17.355	< 0.001
Productivity	0.478	7.725	< 0.001	0.228	59.676	< 0.001

Table 5.23: Linear regression

Source: Researcher's composition

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Table 5.24. is an overview of hypothesis one decisions based on the results.

Research question one: Is there a significant positive relationship between E-WL and creativity in a hybrid work environment?	
Linear regression	
Hypothesis	**Decision**
H_1: E-WL has a significant positive relationship with creativity.	H_1 supported
H_{1a}: *Work–life interference* has a significant negative relationship with creativity.	H_{1a} supported
H_{1b}: *Flexibility* has a significant positive relationship with creativity.	H_{1b} supported
H_{1c}: *Productivity* has a significant positive relationship with creativity.	H_{1c} supported
H_{1d}: *Organisational trust* has a significant positive relationship with creativity.	H_{1d} supported
Hierarchical regression	
H_1: E-WL has a significant positive relationship with creativity.	H_1 partially supported
H_{1a}: *Work–life interference* has a significant negative relationship with creativity.	H_{1a} not supported
H_{1b}: *Flexibility* has a significant positive relationship with creativity.	H_{1b} supported
H_{1c}: *Productivity* has a significant positive relationship with creativity.	H_{1c} supported
H_{1d}: *Organisational trust* has a significant positive relationship with creativity.	H_{1d} not supported

Table 5.24.: Hypothesis one decisions
Source: Researcher's representation

5.7.2. Hierarchical regression

Table 5.25 presents the hierarchical regression results. There were four models that make up the hierarchical regression to address both the hypotheses. The first two models provided evidence to evaluate the hypothesis one which was the relationships between E-WL and creativity. The second model provided evidence to support the second hypothesis.

In the hierarchical regression, the model fit results improved with the introduction of the four dimensions of E-WL to the model however, the significance of the hierarchical regression model declined with the introduction of the moderator and interaction variables (the R-square improved from 0.004 to 0.299 and the F-statistic dropped from 12.371 to 7.448). Therefore, this resulted in only a partial support for the first hypothesis to conclude that E-WL has a significant positive relationship with Creativity. This support only comes from the flexibility (Beta = 0.150) and the productivity (Beta = 0.426) dimensions of E-WL.

When the moderator of Inclusive leadership was added to the model, its Beta coefficient score is only 0.158, which implies that there is no significance at the 5% significance level. Furthermore, neither organisational trust, work life interference, flexibility or productivity were found to be significant predictors of creativity. Therefore, resulting that no support was provided for the second hypothesis, which stated that inclusive leadership significantly moderates the relationship between E-WL and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.

Hierarchical regression	Regression			Model Fit		
	Beta	t-statistic	p-value	R-square	F-statistic	p-value
Model 1: Control Variable				*0.004*	*0.404*	*0.668*
Intermediate Hybrid Working	0.034	0.329	0.742			
High Hybrid Working	0.084	0.81	0.419			
Model 2: Independent Variables				*0.274*	*12.371*	*< 0.001*
Organisational Trust	0.076	1.035	0.302			
Flexibility	0.150	1.993	< 0.05			
Work Life Interference	0.042	0.583	0.561			
Productivity	0.426	6.281	< 0.001			
Model 3: Moderator Variable				*0.286*	*11.227*	*< 0.001*
Inclusive Leadership	0.158	1.874	0.062			
Model 4: Interaction Variables				*0.299*	*7.448*	*< 0.001*
Organisational Trust x IL	0.001	0.012	0.991			
Flexibility x IL	-0.038	-0.479	0.632			
Work Life Interference x IL	0.065	0.931	0.353			
Productivity x IL	-0.133	-1.741	0.083			

Table 5.25.: Hypothesis one decisions

Source: Researcher's representation

Indicated in Table 5.26. is an overview of hypothesis one decisions based on the results.

Research question two: Is there a significant moderating effect of inclusive leadership on the relationship between E-WL and creativity in a hybrid work environment?	
Hierarchical regression	
Hypothesis	Decision
H_2: Inclusive leadership significantly moderates the relationship between E-WL and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.	H_2 not supported
H_{2a}: Inclusive leadership significantly moderates the relationship between work-life interference and creativity so that inclusive leadership exerts a weaker positive influence on creativity in a hybrid work environment.	H_{2a} not supported
H_{2b}: Inclusive leadership significantly moderates the relationship between flexibility and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.	H_{2b} not supported
H_{2c}: Inclusive leadership significantly moderates the relationship between productivity and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.	H_{2c} not supported
H_{2d}: Inclusive leadership significantly moderates the relationship between organisational trust and creativity so that inclusive leadership exerts a stronger positive influence on creativity in a hybrid work environment.	H_{2d} not supported

Table 5.26: Hypothesis two decisions
Source: Researcher's representation

5.8. Conclusion

Chapter 5 sought to present the research results using the methodology highlighted in Chapter 4. The following Chapter delves into the discuss of the presented results.
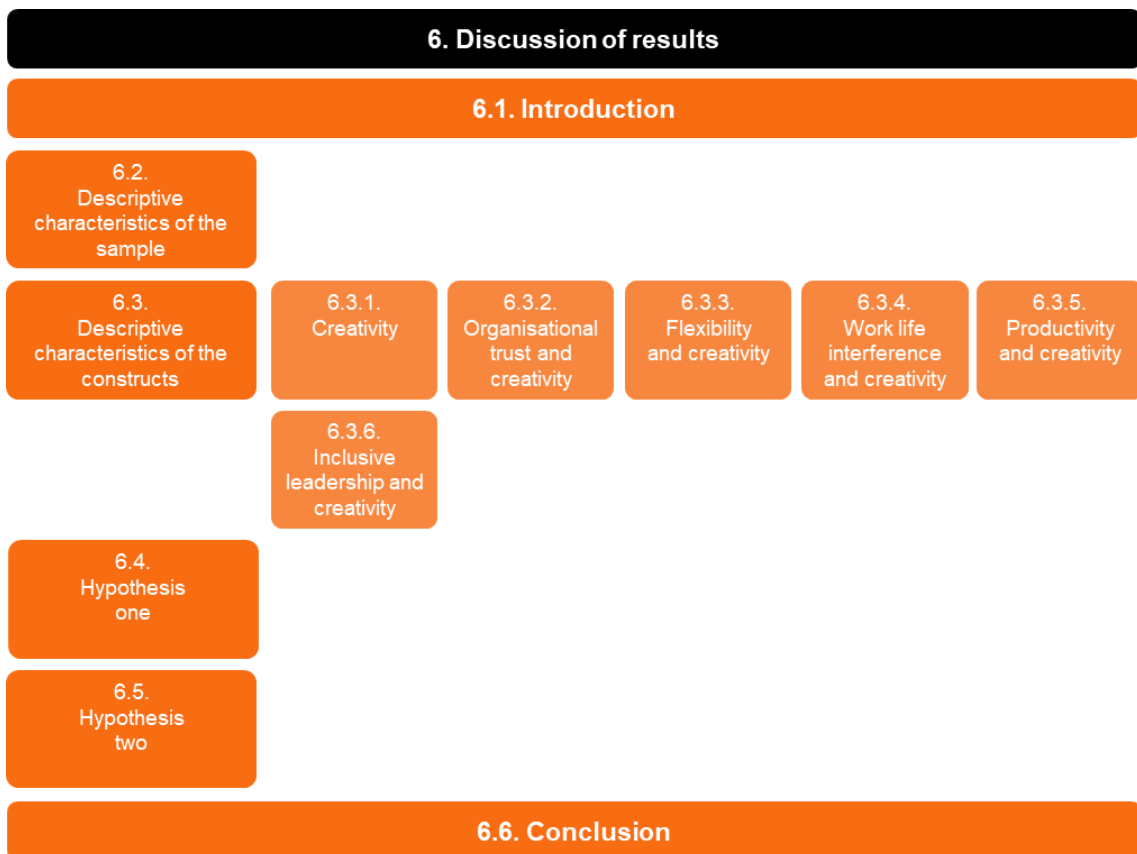
CHAPTER 6: DISCUSSION OF RESULTS

6.1. Introduction

Understanding the phenomenon of e-work in hybrid settings, as well as the life of an e-worker or knowledge worker, has become crucial in the current times. This need has been exacerbated by the COVID-19 pandemic, which highlighted the growing significance of remote work and hybrid work models. Aside from this, employees persist in carrying out their tasks from the comfort of their own homes (Charalampous et al., 2023).

Insights from the literature highlight the complexity of and shift in contemporary workplace dynamics (Chamakiotis et al., 2021; Davison, 2020; Raghuram et al., 2019; Saad & Agogué, 2023), particularly in the context of remote and hybrid work environments (Charalampous et al., 2023), and are therefore key to this study. Gashi et al. (2022) note the importance of understanding the "new normal" created by the pandemic, as it requires consideration of multiple family and caring responsibilities in the home environment, and the co-existence of individuals with families where the home environment is repurposed as a work environment. This is in line with the literature by Gratton (2020; 2021) and Ancona et al. (2020), who confirm that the work environment has changed, and hybrid work arrangements have become the norm.

While this study examined the demographic and dynamics relating to the organisational trust, flexibility, work life interference, productivity, leader behaviour and self-perceived creativity of e-work knowledge workers, understanding these factors is of vital importance in shaping an effective and successful hybrid work environment (Chamakiotis et al., 2021), that capitalises on creativity to survive (Anderson et al., 2014; Lee et al., 2020; Saad & Agogué, 2023; Van Laar et al., 2017).

Chapter 5 provided the results of the research questions the research sought to answer. This chapter delves into the discussion of the research findings whilst tying it back to the literature discussed in Chapter 2. Figure 6.1. provides an overview of the chapter, providing a visual of its structure and content.

Figure 6.1: Chapter 6 - Discussion of results

Source: Researcher's representation

6.2.   Descriptive characteristics of the sample

Amabile (1996b) stresses the importance of demographic measures such as age, gender, and educational level in assessing creativity. The results from the demographic section of the survey aid the understanding of the relationship between the demographic factors and the outcome. Similarly, the age distribution of respondents and their educational background reflects relevant work experience and skills, which can be important in understanding how these factors influence creativity in e-work hybrid environments (Costa et al., 2022;2023; Grant et al., 2011; Michinov et al., 2022).

The age distribution of the respondents indicated that 29% of them were aged from 35 to 39 years, which was the highest proportion of the sample. This age group was found to have many years of work experience, which may also have affected their

creative behaviour (Amabile, 1996b), who also notes that educational level may contribute to the diversity of knowledge and skills among individuals. This is the case in the results of this study, as they indicate that there are different levels of educational background among the respondents, with large numbers having bachelor's degrees, high school diplomas and master's degrees.

The gender distribution indicated a larger number of female respondents. This is particularly relevant to this study, as the literature indicates that women are more affected by remote e-work than men, which causes possible negative effects, such as increased work life interference, work-home conflict, exhaustion, stress (Albrecht et al., 2023) and guilt (Michinov et al., 2022), all of which are known to hinder creativity (Charalampous et al., 2021). The results of this study contradicted this, as the highest percentages of the sample indicated no family conflict and a healthy work-life balance. However, a key finding could be that the 42% of the respondents had no children, and therefore did not experience conflict between the number of days worked from home and children providing a context of caring responsibilities, work schedules and family dynamics.

Chowdhury et al.'s (2022) classification of hybrid work into the three groups of low, intermediate and high work from home, provides a new lens through which to view the results of this research. The results indicated that 50, 49 and 48 respondents worked from home 2, 5 and 3 days a week, respectively. The fact that the majority of the sample worked primarily from home, with a grouping of intermediate to high, highlights the importance of this mode of employment being implemented and understood as the permanent future of work (Gratton, 2020, 2021; Ancona et al., 2020).

A total of 40% of respondents reported having three years of hybrid work, with a further 20% reporting a two-year hybrid work experience. This is indicative of the after-effects of the COVID-19 pandemic, as it began three years ago. It also indicates a sample that may have adapted to hybrid work practices over time, or that might have too little experience in hybrid work, either of which would have impacted on their creative behaviour (Costa et al., 2023) and overall productivity, organisational trust, flexibility, and work-life interference (Charalampous et al., 2022; 2023).

Lastly, the fact that 106 respondents noted different industries showed that creativity is applicable to and valued in a range of industries, with all respondents able to rate their own creativity in the work environment.

6.3. Descriptive characteristics of the constructs

6.3.1. Creativity

The descriptive results for the creativity construct indicated that all the respondents claimed to have creative characteristics. A total of 88% of them reported that they were either 'somewhat characteristic' or 'very characteristic' in exhibiting creativity when given the opportunity to do so. Furthermore, a total of 68% of respondents noted that they are either 'somewhat characteristic' or 'very characteristic' in suggesting alternative ways to achieve goals or objectives. Making a distinction, between situations in which ideas are generated and not implemented and in which they are generated and implemented is important. According to Amabile (1996a), creativity is the foundation of innovation, therefore, an above-average percentage of respondents acknowledged that they exhibited creative behaviours, which, in turn, suggests creative thinking, a key ingredient to organisational creativity (Amabile, 1996a).

A large percentage of the sample preferred e-working remotely. This ties in with the recommendation in the literature to encourage creativity, as it plays an important role in organisational success in today's dynamic business landscape, especially in the transition towards hybrid and agile business practices (Charalampous et al., 2023).

Mind and emotion played an equally important role, with positive emotions fostering creativity and negative emotions hindering it (Amabile, 1996a). The entire creativity scale reflects a positive attitude towards creativity (Zhou & George, 2001). Therefore, it is implied that a significantly large number of the sample display positive emotions when e-working remotely and explaining the high display of creativity characteristics. Amabile et al. (2005) and Blomberg et al. (2017) note that the environment in which creativity takes place can have profound cognitive and emotional impacts on an

individual. Consequently, positive emotions support creativity and enhance retention capacity, especially in knowledge-seeking situations that aid in creative thinking (Amabile, 1996a).

6.3.2. Organisational trust and creativity

All the respondents showed high levels of agreement across the organisational trust dimension, with 86% of respondents agreeing that their organisation trusted them to work effectively when e-working remotely. This is indicative of the concept of organisational trust as defined in the literature and noted by Charalampous et al. (2022; 2023). It is therefore important to note that 86% of the respondents believed that their organisation had full trust in them. Such confidence leads to positive emotions such as satisfaction, gratitude, and pride in tasks, reinforcing creative behaviours (Amabile, 1996a). These emotions are also important motivators for encouraging organisational loyalty and motivation (Charalampous et al., 2023; Grant et al., 2019), which, again, are prerequisites for creativity (Amabile, 1996a).

However, the lowest percentage of respondent's expressed trust in their supervisors to provide career and professional development opportunities when e-working remotely, with only 72% "agreeing" and "strongly agreeing". This showed that the respondents had a higher trust in the organisation than in their leaders; however, the percentage was still high. Blomberg et al., (2017) note that creativity should be encouraged through strategies such as workshops, in order to foster creativity for organisational success. Overall, the result for this dimension highlights the nuanced nature of remote trust in work environments, where different aspects of trust can lead to different perceptions. A study by Zhou and George (2001) emphasises the need for organisations to avoid too much rigidity and micromanagement, as this can limit creative thinking, especially among employees who already have a high sense of responsibility.

This result reaffirms the emphasis of the literature on the positive effects of flexibility in remote work environments, as demonstrated by Charalampous et al. (2023). Although flexibility is defined by time and location-based aspects (Gashi et al., 2019; Grant et al., 2019); it also includes emotions and freedom to focus on personal commitments without feeling guilty. The importance of flexibility in creative

development has been emphasised in the literature (Amabile, 1996a). Amabile (1996a) notes that flexibility creates autonomy for individuals, which is key to encouraging creative thinking. When e-workers are allowed to tailor their work times to their individual needs, they are empowered to think differently and seek creative solutions (Amabile, 1996a). This, however, would need a high level of organisational trust by the manager and the organisation itself for the employee to still be productive. The role of trust and flexibility is further noted by its impact on productivity and work-life balance. A total of 83% of respondents "agree" and "strongly agree" that their managers trust them to be productive when working remotely.

The role of trust and flexibility is further illustrated by its impact on productivity and work-life balance. Charalampous et al. (2023) argue that trust and flexibility contribute to increased productivity and more satisfactory work-life balance. The positive emotional state associated with these concepts contributes to the individual's overall well-being, which in turn enhances their creativity (Amabile, 1996a). Furthermore, Amabile et al. (2005) and Blomberg et al., (2017) note the presence of a positive mood and emotion, which enhances psychological well-being and creativity.

6.3.3. Flexibility and creativity

This dimension reported the most responses with 'disagree' and 'strongly disagree'. This implied that the respondents work in a somewhat flexible environment. However, the most agreeable responses were to the question regarding the locations they worked from. A total of 69% of respondents noted "agree" and "strongly agree" to no restriction on the location they worked from. The least "agree" and "strongly agree" percentage of 37% of respondents indicated that they worked flexible hours each day while juggling their work and personal commitments. This results indicated that they in fact do not work flexible hours due to personal commitments. It could be that the respondents act responsibly, as the literature recognises the importance of self-management for creativity (Blomberg et al., 2017). Albrecht et al. (2023) states that even though flexibility is useful, it can become challenging when it comes to flexible breaks to accommodate work and non-work commitments. Therefore, Albrecht et al. (2023) also note that striking the right balance between flexibility and

responsibility is essential to ensure a productive and creative remote work environment.

Gashi et al. (2022) and Grant et al. (2019) note that flexibility is the freedom to decide how time can be used in order to complete a task. A total of 62% reported "agree" and "strongly agree" to a flexible work environment, as long as the tasks are completed. Similarly, a total of 66% noted "agree" and "strongly agree" to being able to easily take time off e-working when they wanted to; this is beneficial as stress is reduced. Amabile (1996a) emphasises the relationship between flexibility and creative behaviour, especially the ability to think of creative solutions to work and non-work-related problems. Charalampous et al. (2021) assert that flexibility increases involvement and commitment to the organisation, ultimately leading to higher levels of job satisfaction. This, in turn, enhances psychological well-being, creating an environment conducive to creative thinking and creative behaviour (Amabile, 1996a).

6.3.4. Work life interference and creativity

The results showed that the largest number of "agree" and "strongly agree" responses in this section were to the question relating to work-life balance. A total of 66% respondents selected "agree" and "strongly agree" to being happy with their work-life balance when e-working remotely. This was key to this study, as it is an indication that this is the general preference, making it more difficult to revert to traditional work settings.

Charalampous et al. (2022; 2023), Gashi et al. (022), and Grant et al. (2019) note that work-life balance implies that ample time given to both work and non-work commitments, while work-life interference refers to completing tasks with the use of technology, such as emails and calls, thus blurring the lines between work and home life and creating conflict (Charalampous et al. 2023) Constant access to work through technology can tempt individuals to work longer hours to compensate for a lack of physical presence in the eyes of leaders (Grant et al., 2019). Similarly, Gashi et al. (2022) noted that conflict can arise when remote workers tend to work more to compensate for the flexibility or time that they allocate to their working hours for non-work activities. In addition, sharing a home with family and children can blur the

boundaries between work and home life (Costa et al., 2022; 2023).

Charalampous et al. (2023) point out the negative impact of a low work-life balance, especially when role-models and leaders in an organisation demonstrate such practices, causing employees to mimic these harmful business practices and making them the standard. Furthermore, when working from home, it can be difficult to break away from work-related thoughts (Charalampous et al., 2023), creating additional stress and affecting emotions negatively. This speaks to the low percentage of 34% of respondents who selected "agree" and "strongly agree" to often not thinking about their work-related problems outside working hours. Amabile (1996a) comments that thinking about solving problems can lead to creativity behaviours; however, if it tips the work-life balance scale, it can be detrimental to mental health and negatively influence mood and emotion (Blomberg et al., 2017; Elsbach & Hargadon, 2006), thus hindering creativity (Amabile, 1996a).

Costa et al. (2023) note that creativity is possible when employees are creatively focused, with the intention of benefiting from their role, improving organisational effectiveness, and contributing to overall organisational creativity. This motivation has been recognised by Amabile (1996a), as a driver of creativity. However, this is not possible when there is stress on the individual regarding an imbalance in work and home life, including excessive use of technology, to the point of it becoming an interference. In these results, 64% of respondents noted that their relationships did not suffer when they e-worked remotely, and more than half the sample indicated that they know when to stop working and recuperate from their work, which may be an indication of the high level of creative characteristics recognised in the sample.

6.3.5. Productivity and creativity

Respondents for this dimension of E-WL noted a high level of positive feelings towards being productive. More than 80% of the sample indicated "agree" and "strongly agree", tor all the questions regarding productivity when e-working remotely. A total of 90% of respondents noted "agree" and "strongly agree" to still meeting their task deadlines, even if they are interrupted. These findings are consistent with the literature that highlights the positive effects of e-work on productivity, as well as on creativity. Fonner and Roloff (2010) and Gashi et al. (2023)

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state that e-working remotely can increase productivity, with factors such as better work-life balance, reduced office politics, and positive moods and emotions. This emotional well-being contributes to improving productivity, as well as being vital for creativity (Amabile, 1996a). Furthermore, Charalampous et al. (2023) note that remote work policies and processes involve making use of the latest technology, and this can be credited with an increase in productivity.

According to Iazzolino et al. (2017) and Shujahat et al. (2019), autonomy, satisfaction, creativity, and innovation are all prerequisites for productivity. Interestingly, this shows the relationship between productivity and creativity, as one needs to be creative in order to be productive. Tying in with these results, a total of 77% noted "agree" and "strongly agree" to remote e-work making them more productive in completing their assigned tasks and other key deliverables.

The literature points to some of the potential challenges of remote e-work, such as excessive hours and distractions, which can hinder both productivity and creativity (Charalampous et al., 2021). Thus, self-management is an important component in maintaining high productivity and performance (Grant et al., 2013; 2019). This includes. setting and achieving goals, as well as managing distractions to ensure focused work; this can prove vital in being productive (Grant et al., 2019) Therefore, in the dynamic post-COVID environment, in the age of a digital skills-based economy, it is essential for individuals to balance remote work and their personal lives, and to self-manage in order to reap high levels of productivity (Shujahat et al., 2019).

6.3.6. Inclusive leadership and creativity

The results reported positive perceptions regarding e-worker managers' leadership practices, particularly in terms of openness, accessibility, and availability. These findings are consistent with the literature on inclusive leadership, which emphasises these qualities as the behaviours exhibited by inclusive leaders (Carmeli et al., 2010; Nembhard & Edmondson, 2006; Ye et al., 2019), and their importance in fostering innovation (Ye et al., 2019) as well as creativity (Carmeli et al. 2019) in an evolving organisational environment. A total of 72% of respondents selected "Agree" and "Strongly agree", demonstrating that their leaders were open to discussing their problems. This question also had the highest positive responses from the sample.

In addition, "agree" and "strongly agree" was represented by more than 60% of the sample on all of the questions. In South Africa, the historical backdrop of apartheid has brought to light the significance of inclusive leadership in creating diverse and inclusive work environments. In particular, the positive perceptions reported in this study seem to align with the idea that inclusivity and diversity are crucial in this context. This highlights the role of leadership behaviours, as evidenced in the literature, in promoting inclusivity and diversity in a historically divided society (Moodley, 2022).

The findings of the research indicate that leaders demonstrate behaviours linked to inclusive leadership within the emerging hybrid work setting, as the respondents reported positive perceptions of their leaders. Within this challenging context, the significance of inclusive leadership is favoured, due to the behaviours that inclusive leaders display. Tourish (2020) notes that COVID-19 caused challenges to both the theory and practice of leadership, since it is difficult for leaders to make decisions in an unexplored territory. However, Gong et al. (2021) and Hirst et al. (2009) suggest that inclusive leaders are able to integrate people more effectively in new, volatile, and uncertain environments. This attribute is observed to aid in fostering creativity behaviour among followers to promote organisational success, thus creating easier working environments in challenging times (Hirst et al., 2009). In turn, these easier working environments and conditions enable organisations to move forward (Van Laar et al., 2017).

Similarly, Saad & Agogué (2023) note that in order to foster creativity successfully, especially in virtual teams, which are now known as hybrid teams, leaders should ensure cohesion among members by embracing diversity, inclusivity and viewpoints. These behaviours are central to inclusive leadership, and are the main reason why inclusive leadership has gained success over the years in leading virtual teams (Shore et al., 2018).

Inclusive behaviours are known to incidentally enhance creative thinking in followers through building trust, encouragement, motivation and proactiveness towards the acquisition of new skills and knowledge (Choi et al., 2015).

6.4. Hypothesis one

Through the linear regression, the literature, as noted above in Section 6.3, is aligned to the results found in this study, in the sense that each dimension in the E-WL construct separately has a relationship with creativity. The results confirm that organisational trust, flexibility, and productivity are seen to have a significantly positive relationship with creativity, while work-life interference is seen to have a significantly negative relationship with creativity. The literature records some overlap in terms of flexibility, causing some work-life interference (Gashi et al., 2022). Organisational trust is required for flexibility, and productivity is required for organisational trust in a hybrid e-work environment (Charalampous et al., 2023).

However, through the hierarchical regression model, the results become more nuanced as it is tested how the individual dimensions of E-WL work together to contribute to creativity in a hybrid work environment. Interestingly, the results show that the overall relationship between E-WL and creativity is more complex than originally anticipated in the linear regression analysis. In the relationship between E-WL and creativity in a hybrid work environment, not all dimensions are significant with regard to creativity, indicating only a partial support in the relationship. In particular, the dimensions of flexibility and productivity are shown to be contributors to creativity in hybrid work environments. However, the whole is indeed merely the sum of its parts when it comes to E-WL and creativity, proving that flexibility and productivity have been found to have a greater impact on creativity than work-life interference and organisational trust; hence they are the strongest predictors of creativity from amongst all of the E-WL dimensions.

This aligns with the literature that emphasises the importance of flexibility, productivity, and the ability to utilise technology efficiently for enhanced productivity in hybrid work environments (Charalampous et al., 2023). In the concept of E-WL, productivity can refer to the efficient use of digital tools, technologies and resources (Charalampous, 2023). E-workers who are able to use technology to streamline their processes, manage their work more effectively and carry out their tasks, can therefore have more time and mental energy to spend on creative thinking.

These research results also suggest that while being technologically and

electronically literate is crucial, as maintained by the literature, it is the overlap between flexibility and productivity that has the most substantial influence over creative output in a hybrid work setting. A younger demographic, who grew up with technology integrated into their lives, may prove to be more productive, and therefore more creative. Amabile (1996b) notes that age is a key contributor to creative behaviours, due to the accumulation of lived and work experiences.

Additionally, flexibility is viewed as a valuable asset that enhances the overall work experience by allowing individuals to focus on their professional and personal lives. Charalampous et al. (2023) also emphasise that the benefits of flexibility outweigh the disadvantages, encouraging a positive remote e-work experience in which individuals feel confident to do their job, even when their managers do not see them physically, at their work premises. Adding flexibility not only reduces stress but also enhances psychological well-being, creating an environment conducive to creative thinking and innovative behaviour (Amabile, 1996a).

The relationship between E-WL and creativity may be influenced further by the balance between autonomy and flexibility. Flexibility provides a degree of autonomy, allowing e-workers to customise their work schedules (Charalampous et al., 2023). Any level of autonomy can contribute to thinking creatively (Amabile, 1996a). However, too much flexibility without structure can create an unproductive work environment, as structure is also essential for individual creativity (Stojcic et al., 2018). Striking a balance that encourages creativity without compromising productivity is therefore pivotal in flexible environments.

Grant and Russel (2020) note that engaging in creative activities and promoting flexibility is the definition of agile working, which is another term for remote working. Therefore, it can be inferred that individuals who are quick to adapt to working in both home and office environments will be able to think creatively to meet the requirements of their organisations.

6.5. Hypothesis two

When leaders demonstrate openness and accessibility, they create an environment in which employees feel encouraged, valued, and motivated to contribute constructively (Carmeli et al., 2010). This highlights the role of leadership in influencing mood and emotions in the organisation, which also leads to creativity (Amabile et al., 2005). However, together with the literature and the positive attitudes reported in the study, there is insufficient evidence to conclude that there a significant moderating effect of inclusive leadership on the relationship between E-WL and creativity in a hybrid work environment.

This study addressed the argument that characteristics of traditional virtual teams are present and reflected in current remote hybrid teams (Chamakiotis et al., 2021). Gong et al. (2021) emphasised that the success of previous virtual teams was attributed to the behaviours exhibited by inclusive leaders. Lin et al. (2022) and Muhammad. (2021) note that leaders who practise high levels of inclusive leadership have more efficient and effective teams, as employees are not obliged to constrain their thinking. This encourages individuals to develop new ideas, ultimately enhancing their thinking, which is the prerequisite for creativity (Amabile, 1996a). The literature stated that non-inclusive leadership practices hinder employees' growth, skill development, level of engagement and motivation (Carmeli et al., 2010), all of which are crucial for fostering creativity (Amabile, 1996a). A low performance of inclusive behaviours leaves little room for organisational success, as it restricts the opportunities for knowledge acquisition, inhibits innovation and therefore creativity, and dampens employee engagement and motivation (Carmeli et al., 2010).

However, the results of this study do not agree with the literature. This may be attributed to a several factors. For instance, the limited research regarding inclusive leadership and its impact on creativity (Gonng et al., 2021); inclusive leadership being a relatively new leadership style of hybrid work due to COVID-19, and it is possible that it cannot be compared to earlier virtual teams, or that creativity requires collaboration, and therefore cannot be fostered adequately in a hybrid work environment, to which other leadership styles may be better suited. This will be discussed further in Chapter 7.

6.6. Conclusion

The purpose of this chapter was to discuss the findings from results whilst relating them to the literature discussed earlier in this report. It is evident that, although each aspect of E-WL plays a role in shaping creative behaviour, flexibility and performance considerations emerge as key drivers of creativity in a hybrid work environment. However, when inclusive leadership is added to the model, there is no moderating effect.

CHAPTER 7: Conclusion

7.1. Introduction

This research was undertaken in the following progression: The purpose of Chapters 1, 2 and 3 was to define and present the research objectives. Chapter 4: Methodology described the research design, the sample and the collection of the data. Chapter 5: reported on the analysis of the data, and Chapter 6: presented a discussion of the results. While following a deductive approach, each step was aligned with the principles of scientific inquiry commonly applied in business research (Zikmund et al., 2019).

Figure 7.1. provides an overview of the chapter, providing a visual of its structure and content.
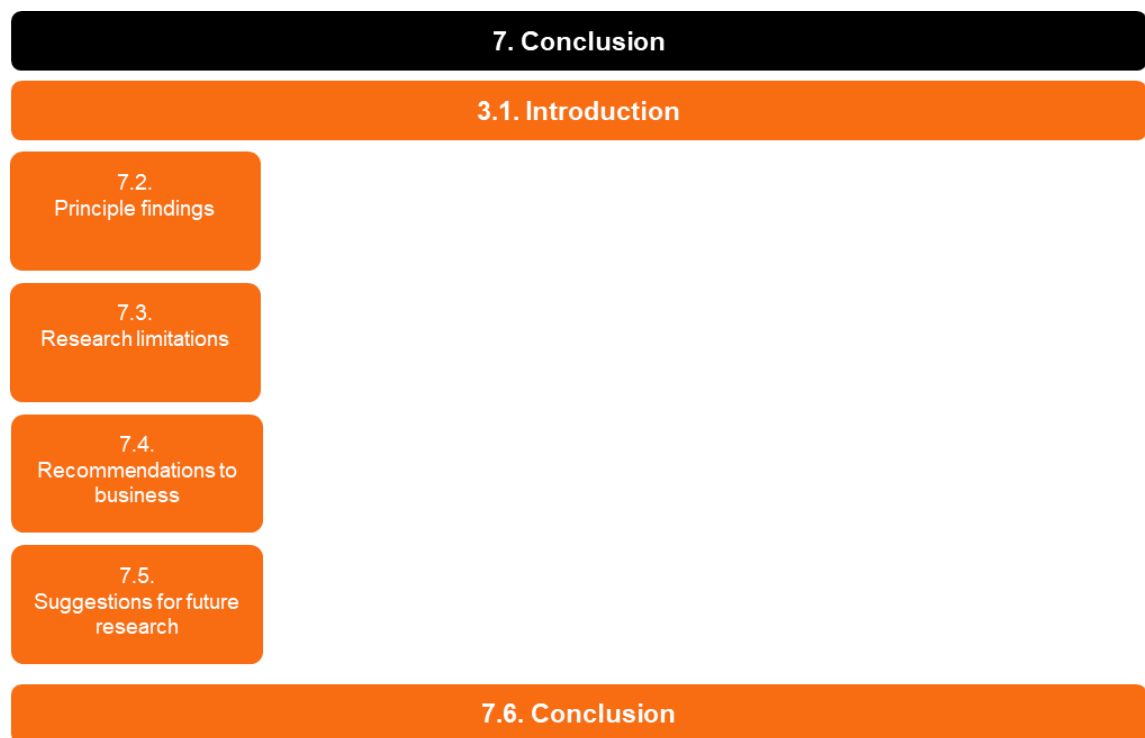
Figure 7.1: Chapter 7 - Results overview
Source: Researcher's representation

7.2. Principle findings

The disruptive impact of the COVID-19 pandemic brought about a need for creativity, as organisations were forced to adapt and re-evaluate their traditional operations, implementing remote work policies to ensure business continuity. This move to remote work is described as one of the most significant shifts in workplace dynamics (Chamakiotis et al., 2021; Davison, 2020; Raghuram et al., 2019; Saad & Agogué, 2023). The need for leaders to navigate this transformation and design effective approaches for creativity in remote and hybrid work environments presented a further challenge (Gratton, 2020). Therefore, this research was intended to investigate the relationship between the hybrid work environment and creativity, and to establish whether inclusive leadership played a role in moderating this relationship.

The principal findings were that in a linear relationship, without any leadership behaviours introduced to the model, productivity and flexibility proved significant in fostering creativity in a sample that practised hybrid work conditions. This proved that there is only partial support to conclude that E-WL has a significantly positive relationship with creativity, as this support results exclusively from the flexibility and productivity dimensions of E-WL.

A control was then added to the model as part of a hierarchical regression to test the moderating role of inclusive leadership. The control was defined by Choudhury et al. (2022) as low, intermediate and high hybrid working environments. This provided no support for the second hypothesis, indicating that inclusive leadership has no moderating effect on the relationship between E-WL and creativity.

7.3. Research limitations

As pointed out in Chapter 4, this study adopted a quantitative approach and adopted the use of established survey instruments. Creswell and Creswell (2018) note that measurement instruments may prove unstable over time. Therefore, it is advised that the measurement, especially for the new E-WL scale, be used in the future with other constructs or specific areas of creativity, and retested for reliability to prove more solid outcomes. This stems from the concern that the E-WL scale may still be new and not encompass a proper understanding of the remote and hybrid work environment in South Africa.

Creativity is a complex construct: Anderson et al. (2014) and Stojcic et al. (2018) note that it involves the organisation and the team; it includes leaders as well as individuals. Amabile (1996a) comments that creativity involves what individuals absorb from their social environment. Similarly, according to Stojcic et al. (2018), creativity is driven by an individual's environment and immediate surroundings. Lastly, both Alblooshi et al. (2021) and Stojcic et al. (2018) note that resources, organisational structure and culture, management and personality all play a part in influencing creativity of an individual. Therefore, the limitation arises that this research, which is a cross-sectional, quantitative study, could not, in fact, identify all the facets of creativity in a specifically hybrid context. Aside from this, manifestations of creativity require collaboration, and that becomes difficult in hybrid settings.

On the other hand, technology might encourage collaboration due to the advanced technologies that are implemented in remote work processes (Charalampous et al., 2023). Therefore, not having a proper understanding of creativity in a specific hybrid work context restricts the findings this study. It might be the case that some roles demand and expect more creativity, while others do not. The type of work that individuals engage in, even though it may be knowledge work, may still demand different levels of creativity, and this could also affect how the individual interacts with E-WL dimensions, causing varied results in creativity output.

Lastly, if companies decide that COVID-19 is not a threat, and do not foresee any future threats, resulting in employees returning to working in offices, then testing these relationships will not be as beneficial as anticipated. Therefore, a longitudinal study should be taken to overcome this limitation.

7.4. Recommendations to business

As organisations find themselves in the era of remote and hybrid work, there is a need to investigate leadership mechanisms that allow for employees to adapt better to meeting the new demands of work. This is due to leaders now finding themselves navigating the complexities of an evolving work environment, where creativity is an essential driver of success.

Hybrid work has the potential to empower employees and provide a better work-life balance; it can also contribute to effective strategies, with tasks clearly based on specific objectives. Additionally, hybrid work processes allow for real-time feedback, which can be beneficial for continuous improvement, feedback, and motivation (Engelbrecht, 2019). This means that if businesses choose to build on the positives, it will be of pivotal importance that both employees and employers adapt to these changes, so employers should encourage the development of creativity skills and competencies in order to function successfully in a hybrid work environment. Similarly, Grant et al. (2023; 2019) notes it is important for individuals to have the support of employers when it comes to providing training. This is because, when individuals are new to remote and hybrid working, training can contribute significantly to enhancing e-work practices and ultimately, productivity.

However, there appears to be a lack of creativity training within business, although individual creativity is known to be the scarcest and most valuable skill in a knowledge economy that is driven by technology (Engelbrecht, 2019). For this reason, businesses need to capitalise on knowing and understanding how valuable it is, so that they can implement measures to enhance it. Furthermore, since knowledge workers are seen as a critical element in technology advanced societies (Shujahat et al., 2019), this hits even closer to home. South Africa may be able to advance successfully into the future if it has the capacity to develop into a knowledge-based economy.

Aside from individual, leadership and hybrid work training, noted in the literature, each dimension has an effect in shaping creative behaviours. However, based on the results of this study, the flexibility and productivity dimensions have emerged as the most significant drivers of creativity in a hybrid work environment. Therefore, it is of utmost importance that businesses look into these dimensions when designing or procuring training and policies.

Additionally, Grant et al. (2013; 2019) notes that any form of effective remote work can only be successful if there is communication regarding the individual's preferences, therefore policies need to be developed with this in mind. This implies

that in order for the e-work life experience to be successful, organisations and their leaders must be mindful of their ability to build trust and relationships; this is vital in virtual teams post covid (Chamakiotis et al., 2021).

Lastly, as a business student, researcher, knowledge worker, creative, mother, wife and hybrid e-worker, I find it beneficial to share my experience. In the creative realm, technology has proved to be important in aiding the transition. It has brought to light new possibilities for teamwork and collaboration, creativity and conceptual research. However, hybrid work has reshaped how I balance my creative output with household responsibilities. This is a strong reflection of the changing work landscape, especially as it impacts women. Other challenges are space constraints and the distractions that often arise. Therefore, it is recommended that businesses be proactive about employees working in other locations besides the home, as this can aid in mental well-being, flexibility, and work-life balance. It would be especially helpful for creatives like myself to be exposed to new trends and opportunities increase my knowledge.

7.5.   Suggestions for future research

Gashi et al. (2022) states that we find ourselves in a crucial time that demands an understanding of all the factors that make up a remote work experience, as these work models can only deliver success if they are properly understood and implemented. Saad & Agogué (2023), note a lack of longitudinal research documenting the transformation of previous virtual work to hybrid work and creativity and therefore this may be seen as a future avenue of research.

Similarly, Reiter-Palmon et al. (2021) maintain that future research could also investigate how certain parts of the creativity process occur face-to-face. It This could also be a relevant area for investigation: how some processes in the creative process may be able to perform remotely and how technology such as voice only, or video, impact the remote experience when communicating, and how communication encourages creative thinking and behaviours.

In noting the research limitations in understanding creativity (section 7.2.), Amabile

(1996a) explains that although leaders may be able to identify a concept such as productivity in their followers, it may be difficult to identify creativity. Therefore, it is recommended that experts in creativity are better to judge creativity in others (Amabile, 1996a). Due to this, is it advised that future research allow for experts in creativity to rate the creativity of hybrid e-work employees to gain deeper insights into the level of creativity outcomes, or else, or in addition, adopting a more experimental approach.

This research, led by the literature, focused primarily on inclusive leadership, as the behaviours that are practised by inclusive leaders has showed success in the past in leading virtual teams (Shore et al., 2018). Also, inclusive leaders are known to give employees a sense of being "at home" while working (Korkmaz et al., 2022). Keeping in mind that this study found no support for the idea that inclusive leadership can moderate the relationship between hybrid work environments and creativity, other leadership styles need to be investigated in this context. Recognising that different leadership styles can impact creativity in varying ways is important for leadership development and training, and the impact of this training should be investigated in the remote and hybrid work contexts.

7.6. Conclusion

The contemporary and dynamic business landscape places a huge emphasis on creativity for organisational growth, survival, and success (Anderson et al., 2014; Lee et al., 2020). Creativity is recognised as a critical skill to aid in navigating the complex and rapidly changing environments that we find ourselves in the twenty-first century. Therefore, it is imperative that organisations embrace the creative potential of their workforce to remain competitive and ensure survival (Van Laar et al., 2017). Whether it be through leadership training, in house training, technological training, creativity training, or adopting strategies inclusivity designed for the South African context, something needs to change, or we will be left behind.

In response to the opening adage - "It is not the strongest of the species that survives, nor the most intelligent; it is the one most responsive to change" - COVID-19 has changed the world as we know it, therefore we need to ask ourselves the question, how can we continue to operate as though never happened?

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Appendix A: Sample questionnaire

The effects of hybrid work life on creativity: The role of Inclusive Leadership

Dear Participant,

I am a student at the Gordon Institute of Business Science, affiliated with the University of Pretoria. I invite your participation in this survey, a key component of my MBA research.

This study focuses on the experiences of electronic workers and their impact on creativity within hybrid work environments. The COVID-19 pandemic has compelled organisations to re-evaluate and adapt their traditional operating practices, giving rise to hybrid work arrangements. Creativity has emerged as a crucial tool for achieving success amid unprecedented challenges and uncertainties that threaten organisational survival. Among the myriad of factors that influence creativity for organisational success, leadership emerges as a pivotal antecedent. Therefore, post the pandemic, a need arises to investigate workplace dynamics and leadership within the hybrid work environment. Inclusive Leadership is tested in this study considering its previous success in fostering creativity in similar environments.

The survey is designed to take approximately 10 minutes to complete. I assure you that your participation is entirely **anonymous and voluntary**, and you are free to withdraw from the research at any point without consequence. While your responses will remain confidential, it's important to note that aggregated results may be shared. By completing this survey, you signify your voluntary engagement in this research. Your insights and contributions are immensely valued, and I extend my heartfelt gratitude for your time and willingness to participate.

For any queries regarding this research, please reach out to:

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Demographics

1. Age
    I.   18-25 years
   II.   25-29 years
  III.   30-34 years
  IV.   35-39 years
   V.   More than 40 years

2. Sex
    I.   Male
   II.   Female
  III.   I prefer not to say

3. Education
    I.   High school
   II.   Technical college
  III.   Bachelor's degree
  IV.   Master's degree
   V.   Doctoral degree

4. Ethnicity
    I.   Black African
   II.   Coloured
  III.   Indian/Asian
  IV.   White
   V.   I prefer not to say
  VI.   Other

5. Industry
    I.   Manufacturing
   II.   Trade, catering & accommodation
  III.   Electricity, gas & water
  IV.   Transport, storage & communication
   V.   Finance, real estate & business services
  VI.   General government services
 VII.   Personal services
VIII.   Agriculture, forestry & fishing
  IX.   Construction
   X.   Mining & quarrying
  XI.   Other

6. Province
    I.   Western Cape
   II.   Eastern Cape
  III.   Northern Cape
  IV.   Free State
   V.   KwaZulu-Natal
  VI.   North West
 VII.   Gauteng
VIII.   Mpumalanga
  IX.   Limpopo

Hybrid electronic-work environment
This section is to better understand your hybrid work-life environment

1. Approximately, how often do work from home as opposed to the office?
    I.   1 day a week
   II.   2 days a week
  III.   3 days a week
  IV.   4 days a week
   V.   5 days a week
  VI.   Never

2. How many children do you have that live with you?
    I.   1 child
   II.   2 children
  III.   3 children
  IV.   4+ children
   V.   No children

3. How many years of experience do you have working remotely?
    I.   1 year
   II.   2 years
  III.   3 years
  IV.   4 years
   V.   5 years
  VI.   6 years
 VII.   7 years
VIII.   8 years
  IX.   9 years
   X.   10+ years

Electronic-work life
This section is to better understand your experiences in your hybrid work-life environment.

On a five-point Likert scale ranging from 1, "strongly disagree" to 5, "strongly agree".

Organisational trust
1. I trust my organisation to provide good e-working facilities to allow me to e-work effectively
2. My organisation trusts me to be effective in my role when I e-work remotely
3. My manager does not micro-manage me when e-working remotely
4. I trust my manager to provide me with career professional developmental opportunities when e-working remotely
5. When I am not visible e-working remotely, my manager trusts me to work effectively

Flexibility
6. My work is so flexible I could easily take time off e-working remotely, if and when I want to
7. My line manager allows me to flex my hours to meet my needs, providing all the work is completed
8. There are no constraints on the location where I work providing I complete my role effectively
9. I work flexible hours across the day breaking down my hours to suit my work and non-work commitments

Work–life interference
10. My e-working does not take up time that I would like to spend with my family/friends or on other non-work activities
11. When e-working remotely I do not often think about work-related problems outside of my normal working hours
12. I am happy with my work–life balance when e-working remotely
13. Constant access to work through e-working is not very tiring
14. When e-working from home I do know when to switch off so that I can recuperate effectively
15. My relationships suffer when I am e-working remotely

Productivity
16. When e-working I can concentrate better on my work tasks
17. E-working makes me more effective to deliver against my key objectives and deliverables

18. My overall job productivity has increased by my ability to e-work remotely/from home
19. If I am interrupted when working from home I still meet my manager's quality expectations
20. I can cope with work demands more effectively when I e-work remotely

Creativity
This section is to better understand your creativity characteristics in your hybrid work-life environment.

On a five-point scale ranging from 1, "not at all characteristic" to 5, "very characteristic".

1. I suggest new ways to achieve goals or objectives.
2. I come up with new and practical ideas to improve performance.
3. I search out new technologies, processes, techniques, and/or product ideas.
4. I suggest new ways to increase quality.
5. I am a good source of creative ideas.
6. I am not afraid to take risks.
7. I promote and champion ideas to others.
8. I exhibit creativity on the job when given the opportunity to.
9. I develop adequate plans and schedules for the implementation of new ideas.
10. I often have new and innovative ideas.
11. I come up with creative solutions to problems.
12. I often have a fresh approach to problems.
13. I suggest new ways of performing work tasks.

Inclusive leadership
This section is to better understand how you perceive your manager.

On a five-point Likert scale ranging from 1, "strongly disagree" to 5, "strongly agree".

1. My manager is open to hearing new ideas.
2. My manager is attentive to new opportunities to improve work processes.
3. My manager is open to discuss the desired goals and new ways to achieve them.
4. My manager is available for consultation on problems.
5. My manager is an ongoing 'presence' in this team and someone who is readily available.

6. My manager is available for professional questions I would like to consult with him/her.
7. My manager is ready to listen to my requests.
8. My manager encourages me to access him/her on emerging issues.
9. My manager is accessible for discussing emerging problems.
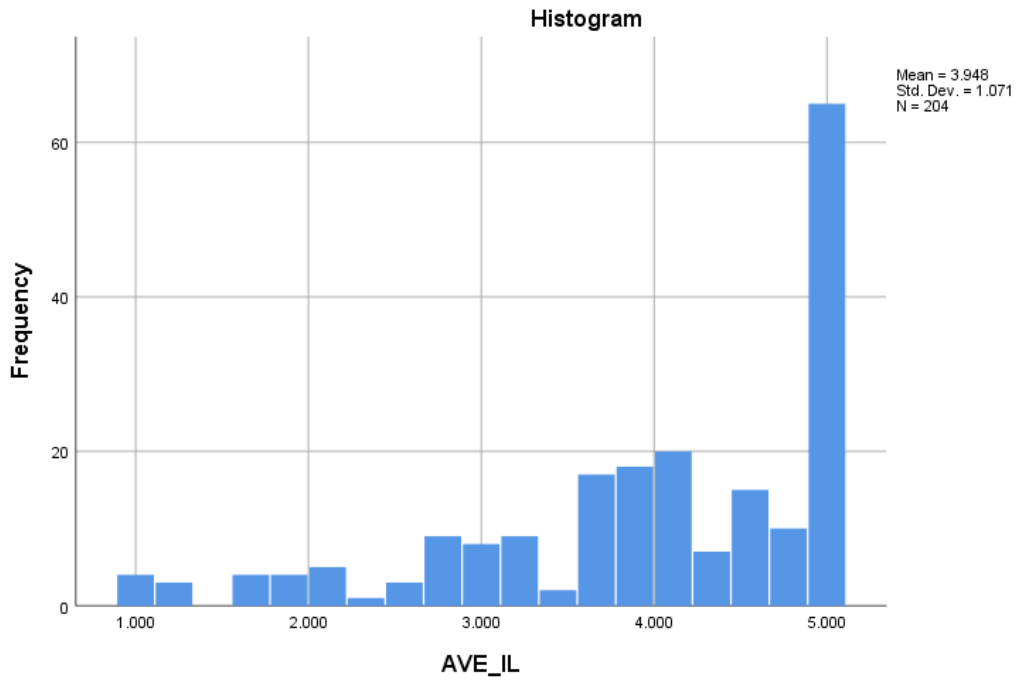
Section 7 of 7

Thoughts on hybrid e-work, creativity and inclusive leadership (Optional)

Would you like to add anything further to the research regarding your thoughts on hybrid e-work, creativity and inclusive leadership?

Appendix B: Normality (histograms and Q-Q plots)

Organisational Trust

Flexibility

Work Life Interference

Histogram

Mean = 3.477
Std. Dev. = .949
N = 204

Normal Q-Q Plot of AVE_WORKLIFE_INTERFERENCE

Productivity

Histogram

Mean = 4.285
Std. Dev. = .750
N = 204

AVE_PRODUCTIVITY

Normal Q-Q Plot of AVE_PRODUCTIVITY

Observed Value

Creativity

Histogram

Mean = 4.003
Std. Dev. = .781
N = 204

AVE_Creativity

Normal Q-Q Plot of AVE_Creativity

Inclusive Leadership

Histogram

Mean = 3.948
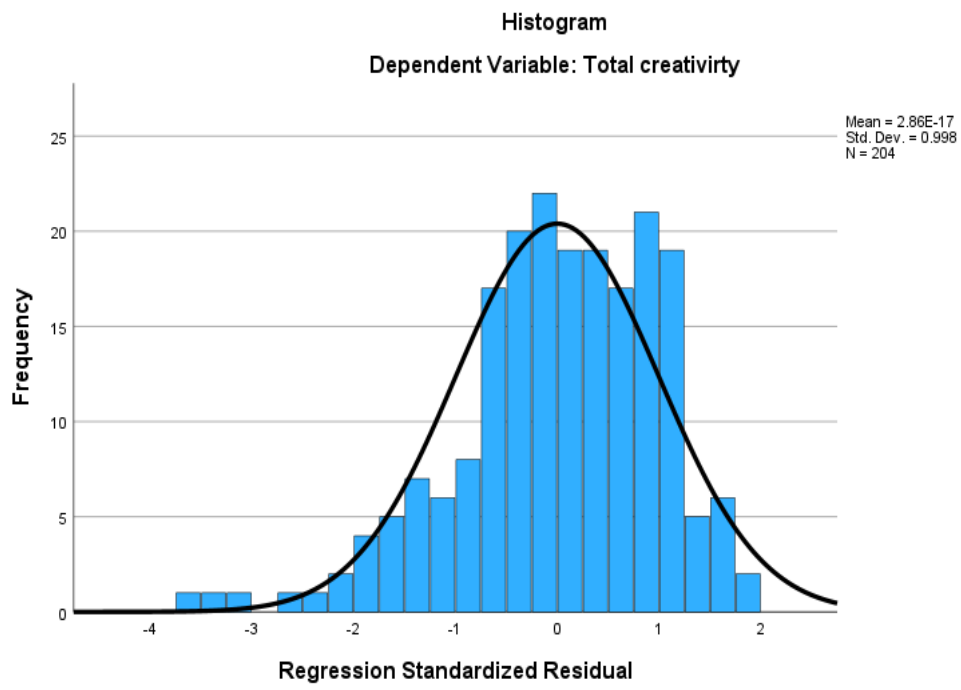Std. Dev. = 1.071
N = 204

AVE_IL

Normal Q-Q Plot of AVE_IL
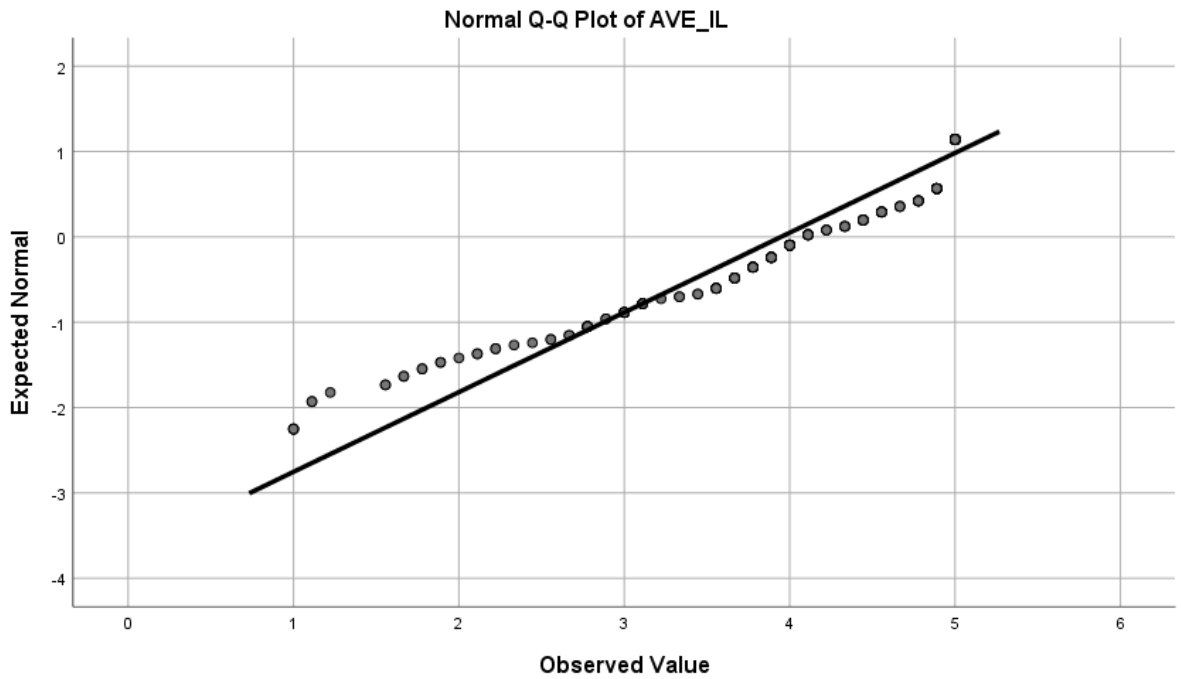
Appendix C: Linear regression assumptions

Organisational Trust

Histogram
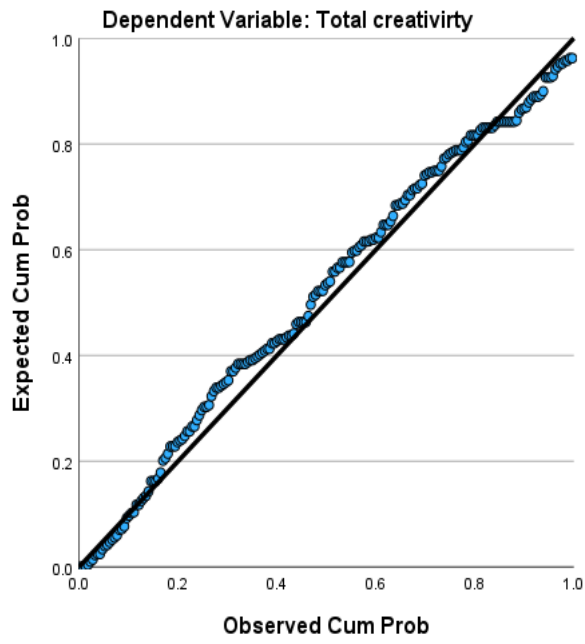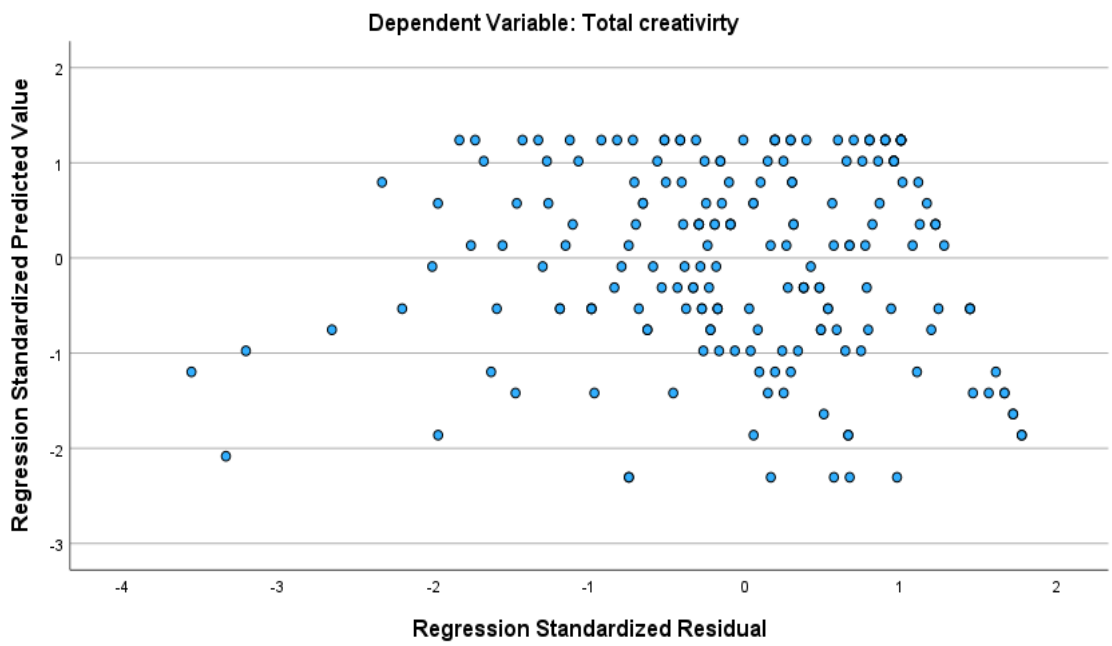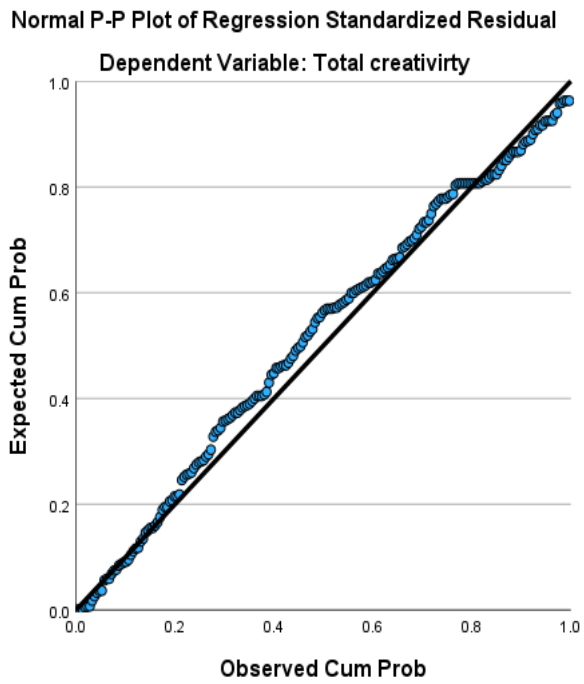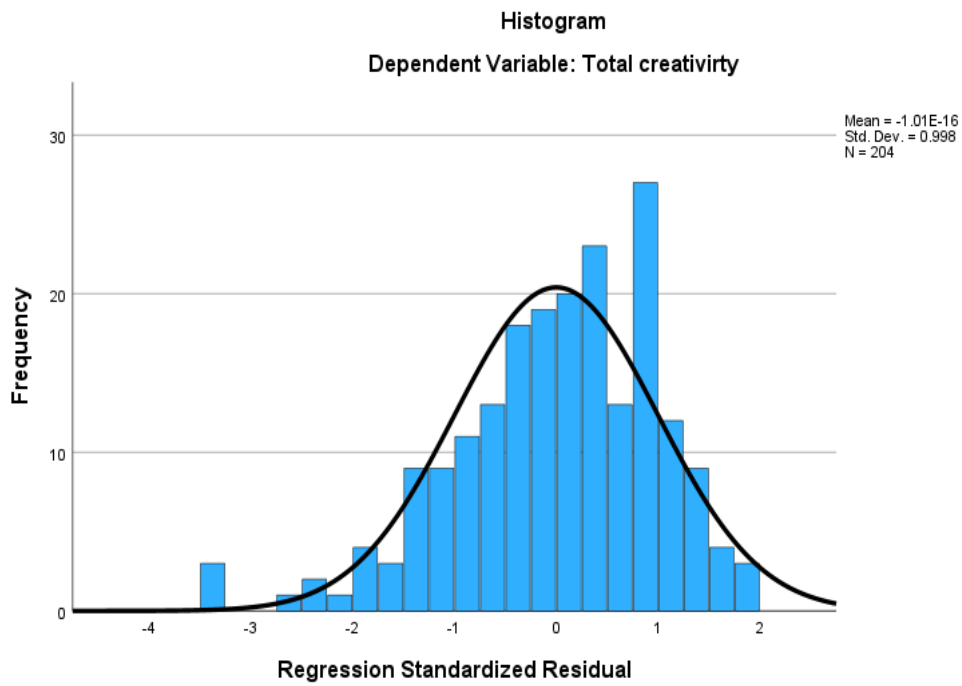Dependent Variable: Total creativirty

Mean = -5.51E-16
Std. Dev. = 0.998
N = 204

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Total creativirty

Scatterplot

Dependent Variable: Total creativirty

Flexibility

Histogram

Dependent Variable: Total creativirty

Mean = 2.86E-17
Std. Dev. = 0.998
N = 204

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Total creativirty

Scatterplot

Dependent Variable: Total creativirty

Work Life Interference

Histogram
Dependent Variable: Total creativirty

Mean = -1.01E-16
Std. Dev. = 0.998
N = 204

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Total creativirty

Scatterplot
Dependent Variable: Total creativirty

Productivity

Histogram
Dependent Variable: Total creativirty
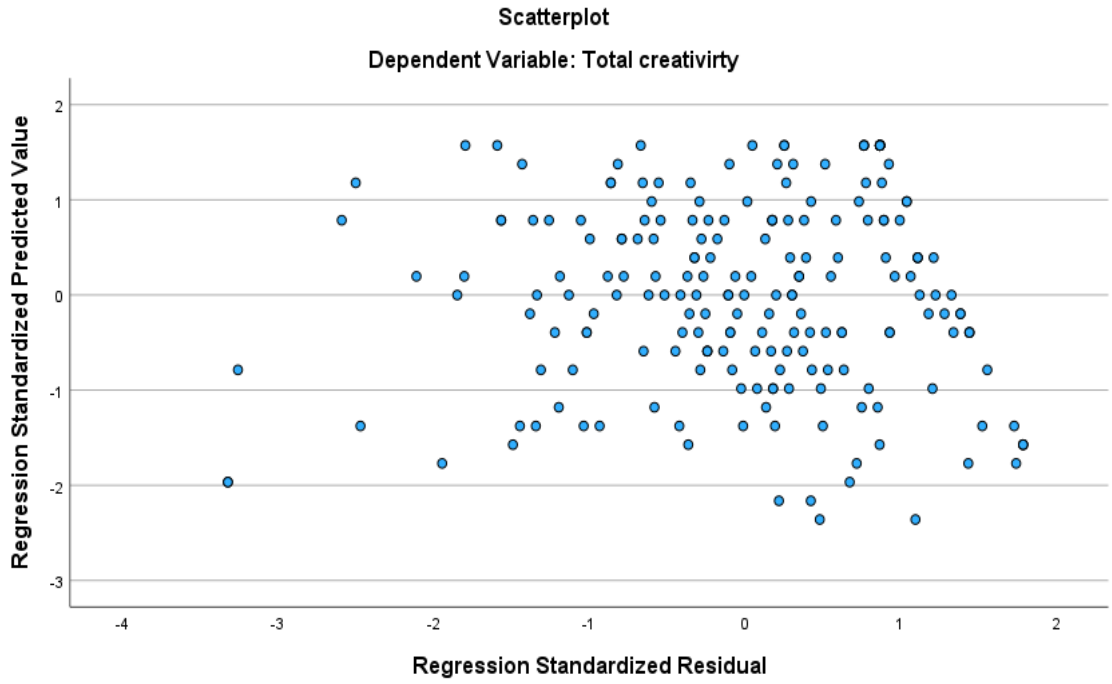
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Normal P-P Plot of Regression Standardized Residual

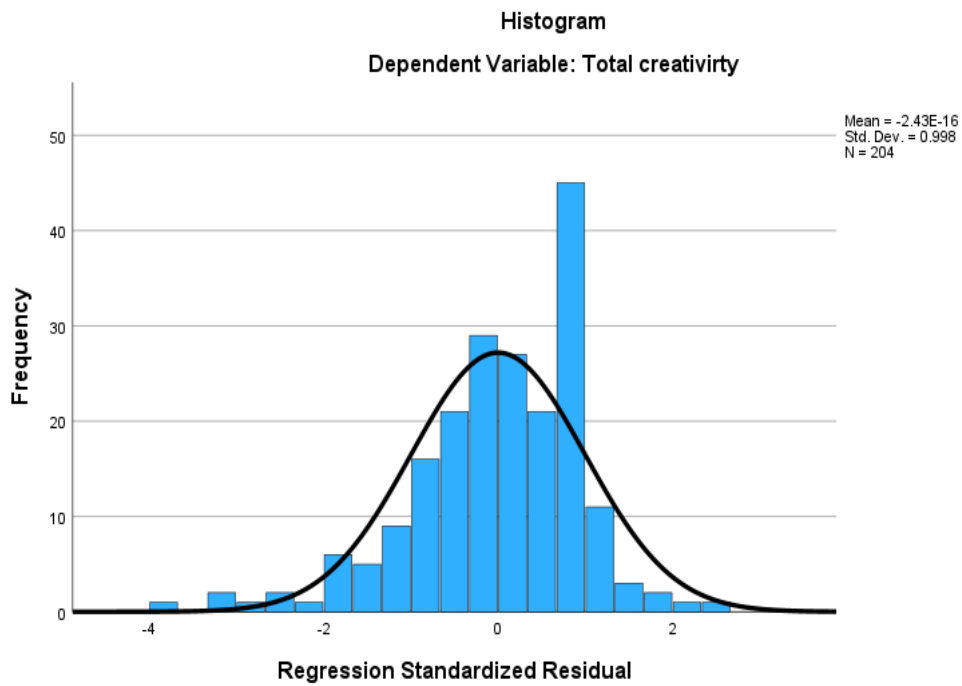Dependent Variable: Total creativirty

Scatterplot

Dependent Variable: Total creativirty

Appendix F: Hierarchical regression assumptions (residuals normally distributed and scatterplots)

Histogram
Dependent Variable: MC_CREATIVITY

Mean = -3.64E-17
Std. Dev. = 0.973
N = 204

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: MC_CREATIVITY

Scatterplot

Dependent Variable: MC_CREATIVITY