INSTITUTO UNIVERSITÁRIO DE LISBOA

Extroversion and Introversion in the Organisational World

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Dedication

To the three women of my life.

Acknowledgements

With this chapter coming to an end, I would like to take a moment to express my heartfelt gratitude to those who have made a difference throughout this journey.

Firstly, I would like to express my gratitude to my supervisor, Maria João Velez, for the guidance and insights provided that helped shape this work.

I would also like to acknowledge some of my friends. I would like to thank Érica Antunes for her ongoing support while suffering alongside me. I would like to thank Juliana Gonçalves, for her invaluable help and insightful contributions.

I am deeply grateful to Miguel Albuquerque for his support and motivation, and, above all, for always understanding me without judgment.

I would also like to thank my father for his care and support throughout this phase.

At last, I wish to express my most profound gratitude to my cousin/ grandmother Rosália, my grandmother and my mother, without whom none of this would have ever been possible.

Resumo

Os tipos de personalidade têm sido amplamente estudados para explicar fenómenos organizacionais. A extroversão foi constantemente relacionada a contextos de liderança (Blevins et al., 2021), enquanto a introversão foi negligenciada, criando-se a noção que esta está negativamente associada às competências de comunicação e eficácia da liderança (Cain, 2012) que são cruciais para o sucesso organizacional (Hackman & Johnson, 2013). Este estudo pretende colmatar esta lacuna na literatura, avaliando a forma como estes tipos de personalidade influenciam a eficácia da liderança quando mediados pelas competências de comunicação. Uma abordagem quantitativa foi adotada, com recurso a dois questionários: 172 líderes responderam a um teste de personalidade e autoavaliaram as suas competências de comunicação e eficácia de liderança, enquanto 99 empregados avaliaram os seus líderes. Cada conjunto de dados possibilitou a execução de dois testes de hipóteses. O primeiro conjunto de dados apoiou a relação entre extroversão e eficácia da liderança, mas rejeitou-a no caso da introversão. O segundo teste de hipóteses não encontrou uma correlação significativa entre os traços de personalidade e a eficácia da liderança. No entanto, as competências de comunicação apresentaram a correlação mais forte com a eficácia da liderança, independentemente do tipo de personalidade. Assim, este estudo proporcionou um avanço na literatura ao contestar as suposições sobre extroversão e introversão em contextos de liderança, enquanto defende modelos de liderança mais inclusivos que destacam a importância das competências. Estudos futuros devem desenvolver métodos para avaliar melhor os tipos de personalidade e, ao mesmo tempo, aprofundar o conhecimento sobre a introversão.

Palavras-chave: Tipos de Personalidade; Extroversão; Introversão; Competência de Comunicação; Eficácia da Liderança.

Código Jel: J24 – Capital Humano, Competências; J53 – Relações da Gestão do Trabalho; M54 – Gestão do Trabalho.

Abstract

Personality has long been studied to explain diverse organisational outcomes. While extroversion was often positively portrayed in leadership contexts (Blevins et al., 2021), introversion tends to be perceived negatively, leading to misconceptions about its impact on organisational success (McCord & Joseph, 2020). Leadership effectiveness and communication skills are imperative for the success of the organisational world (Hackman & Johnson, 2013); however, introverts were deemed less suitable for leadership roles (Cain, 2012; McCord & Joseph, 2020). This study aims to address this gap and misconceptions in the literature by assessing how these personality types influence leadership effectiveness when mediated by communication skills. A quantitative approach was adopted, utilising two questionnaires: 172 leaders answered a personality test and self-evaluated their communication skills and leadership effectiveness, while 99 employees evaluated their leaders. Based on each data set, two hypothesis tests were conducted. The first dataset supported the relationship between extroversion and leadership effectiveness although rejecting them for introversion. The second hypothesis test found no significant correlation between personality traits and leadership effectiveness. Overall, communication skills emerged as the strongest predictor of leadership effectiveness, regardless of personality type. In sum, this study provided an advancement to the literature by highlighting the need to reevaluate the assumptions surrounding extroversion and introversion and addressing their potential for leadership roles, while advocating for more inclusive leadership models that prioritise skills over personality traits. Future research should develop methods to better assess personality types while also investigating the dynamics between personality, communication, and leadership effectiveness.

Keywords: Personality types; Extroversion; Introversion; Communication Skills; Leadership Effectiveness.

Jel Code: J24 – Human Capital, Skills; J53 – Labor–Management Relations; M54 – Labor Management.

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1. Introduction

The organisational world is a complex system composed of many layers. Every company has its mission and vision and, to accomplish those goals, each organisation must look into their workforce for their individuality and differences and then provide the best work environment to harvest the best of their potential (McCord & Joseph, 2020, p. 7).

Organisations are composed of different types of people who must have a wide range of competencies to complete their job functions and ultimately bring the due success to each organisation. Two of the most important competencies to have in the organisational world are communication and leadership, in which the first one is a must to have an effective leadership style (Mitchell et al. 2022). Effective leadership is crucial for mobilising teams and aligning efforts towards achieving organisational goals (Northouse, 2016). Effective leaders play a pivotal role in building and maintaining cohesive teams (Hogan & Kaiser, 2005) by motivating and inspiring the team to collaborate successfully (Edelman & Knippenberg, 2018). To do so, leaders need to excel in communication skills. Leadership is essentially a communication-based activity (Hackman & Johnson, 2013) since leaders rely on effective communication to transfer knowledge, share information, and coordinate tasks within their teams (Hackman & Johnson, 2013; Mitchell et al., 2022). This ability not only allows them to articulate organisational goals clearly but also ensures that all team members understand and align with these objectives, creating a shared vision among team members and fostering unity and collective effort towards common goals (Fairhurst & Connaughton, 2014). Additionally, strong communication skills enable leaders to build strong relationships with their team members based on trust and mutual understanding, leading to higher job satisfaction, improved morale, and increased productivity among team members (Riggio et al., 2003). Still, these two competencies of communication and leadership might evidence themselves differently since every individual is different from one another due to their different personalities. Personality is a construct that, despite partly heritable (Barrick & Mount, 1991), is developed through numerous processes that shape one's self-concept and behaviour (McCrae & Costa, 1999), which set people aside from one another (Colbert et al., 2014). At the core of these differences lie the duality of Extroversion and Introversion (Mitchell et al. 2022).

According to Carl Jung, Extroversion describes an outward focus of energy (Jung, 1971) reflecting an inclination to enjoy social interactions and characterising people who are sociable, gregarious, talkative, outgoing, and active (Mitchell et al. 2022). In this sense, Extroversion is often associated with the skill of Communication and so, Extroverts are often seen as smarter and more competent than their introverted counterparts, facilitating the occupation of leadership positions (Mitchell et al. 2022; Cain, 2012). On the other hand, Introverts present an inward focus of energy (Jung, 1971, p. 626), reflecting people who are more reserved and introspective (Cain, 2012) and therefore

seen as cold and less competent (McCord & Joseph, 2020), ending up being "overlooked for leadership positions" (Cain, 2012, cited by McCord & Joseph, 2020, p. 1).

However, the literature supports that extroverts do have an inclination for communication but the conceptual definition of this term does not encompass the communication skill; this is, "extraverts desire social interaction and may develop social skill as a potential behavioral adaptation, but the conceptualization of extraversion does not indicate the presence of communication skill" (Mitchell et al., 2022, p. 1526). Communication Skill is, in fact, "how effectively an individual presents information using verbal and nonverbal communication" (Riggio et al., 1991, cited by Mitchell et al., 2022, p. 1526), entailing both a verbal and nonverbal stance when conveying information which facilitates knowledge transfer and the resolution of tasks (Mitchell et al., 2022).

In sum, the personality type of extroversion is often associated with high communication skills which makes scholars assume extroverts make better leaders (Mitchell et al., 2022). Simultaneously, as extroverts are associated with communication skills and leadership positions, introverts are often seen as people with low communication skills, who do not like social interaction and, therefore, are not cut to be leaders (McCord & Joseph, 2020). Mitchell et al. (2022) concluded that, in fact, "communication skill served as a more consistent predictor of leadership emergence than extraversion", since both communication and leadership skills can be developed and extroversion is more "trait-like and stable". So, it may be safe to assume that introverts with high communication skills might also be effective leaders.

In this sense, the interest in this topic arises from the misconceptions surrounding Introversion and Extroversion (Blevins et al., 2021; Laney, 2002; Cain, 2012; Taylor, 2022). Throughout the years, Introversion was labelled as the negative side of Extroversion. In personality tests, Introversion sat opposite to Extroversion, harnessing the flaws of what meant not to be an Extrovert (Scheller, 2012, cited by Blevins et al., 2021; Taylor, 2022). Thus, researchers also focused on studying the potential of Extroversion in the workplace, emphasising its benefits at individual, leadership, and team levels (Grant et al. 2011). Introversion, on the other hand, was neglected in literature (Schueller, 2012, cited by Blevins et al., 2021). Authors have reported how personality assessments are used in selection and promotion occasions, often being used in favour of extroverts, secluding introverts to a loop of unfairness, discrimination and mistreatment based on personality measures in their workplace. This contributes to the sustaining of the assumptions that introverts are incompetent and cannot possess good communication skills and therefore are not apt to be in leadership roles (McCord & Joseph, 2020). However, recent studies have come to prove that this relationship is not so linear and that introverts can also have their advantages and succeed in the organisational world (Cain, 2012; Laney, 2002; Mitchell et al., 2022).

Keeping this in mind, the research question "How does the personality types of extroversion and introversion influence leadership effectiveness in the workplace according to the level of the communication skills of a leader?" was posed with the aim to break down misconceptions and assess if a person's competence to communicate and effectively lead is influenced by the Extroversion/ Introversion personality.

Furthermore, the relevance of this study is anchored in addressing an ongoing gap, particularly in how introversion and extroversion are perceived and utilised in the organisational world, aiming to contribute to the literature in several ways. First and foremost, it seeks to empirically conceptualise the terms of Extroversion and Introversion. Although Jung (1971) introduced these terminologies to avoid misconceptions, Freud (1920) ascribed a positive connotation to extroversion, associating it with maturity, while linking introversion to a developmental impediment and neurosis – a perspective perpetuated by other scholars that has influenced how introversion is perceived to this day (Blevins et al., 2021). As stated, this has led to misconceptions and sometimes mistreatment of introverts in the workplace (McCord & Joseph, 2020). As such, this study also aims to gain insight into how Introverts can possess strong communication skills and be effective leaders. Moreover, that there can be effective leaders with good communication skills independently if they are Extroverts or Introverts, but who excel in their own individual way. As argued by Mitchell et al. (2022), personality types do not encompass any skill, including communication, defending that introverts might also become effective leaders by investing in such skills. In fact, research has supported that introvert's receptiveness also aligns with leadership effectiveness. Lastly, this study aims to assist leaders, and by extension, organisations, in understanding the advantages of both introverted and extroverted communication styles so that they can tailor their communication approaches to make leadership more effective, since when working in environments that align with an individual strength, the performance is heightened (McCord & Joseph, 2020).

Having that, this paper will be divided into the following chapters: Literature Review, which will be further divided into a section about the personality types of Extroversion and Introversion, Leadership Effectiveness and Communication Skills; Methodology, detailing the procedure, instruments and measures utilised, along with the characterisation of the sample; Results, providing a thorough analysis of the data obtained; Discussion, where the results will be discussed and confronted with the current literature; and, lastly, Conclusion, where the final conclusions will be presented, along with the limitations found and suggest potential areas for future research.

2. Literature Review

Personality serves as a foundational element that accompanies individuals throughout life. As such, its study has been a prevalent theme of research in the domain of psychology for years (Blevins et al., 2021). Studies, theories, and tests have been published with the aim of better understanding ourselves as individuals and as members of society, also extending its importance to many other areas – including the organisational context.

2.1 Extroversion & Introversion

Carl Jung, a renowned psychologist of the 20th century, was a pioneer in these studies by dividing personality into two dimensions – Extroversion and Introversion – and setting the foundation for studies of the different personality types (Jung, 1971).

Jung defined extroversion as an "outward turning of libido", a "transfer of interest from subject to object" (Jung, 1971, p. 594). In practical terms, extroverts are naturally "drawn to the external life of people and activities" (Jung, 1921, cited by Cain, 2012, p. 19), characterising individuals that are more outgoing, sociable, talkative and active (Mitchell et al., 2022). Conversely, introversion represents an "inward turning of libido", in which the "subject is the prime motivating factor and that the object is of secondary importance" (Jung, 1971, p. 626), this is, "introverts are drawn to the inner world of thought and feeling" (Jung, 1921, cited by Cain, 2012, p. 19). These individuals are characterised as introspective, thoughtful, independent and reserved (Blevins et al., 2021). However, the differences between these two psychological mechanisms go much deeper than that.

According to Laney (2002), the main differences between extroverts and introverts lie in how they respond to stimulation and refuel their energy (Laney, 2002). The external world houses all sorts of stimulation (Cain, 2012). As stated, extroverts are drawn to the external world where they "thrive on a variety of stimuli" (Laney, 2002, p. 20), being always ready to engage in all sorts of activities. Withal, this external stimulation serves as their primary energy source, needing to refuel when they feel understimulated – this is, when they are not in the centre of the action (Laney, 2002). On the contrary, despite enjoying experiences in the external world, introverts often end up feeling overstimulated and drained by hectic environments (Laney, 2002). When in that state, introverts need to refuel by retreating into "their internal world of ideas, impressions, and emotions" (Laney, 2002, p. 21). In sum, "Introverts and Extroverts often need very different levels of stimulation to function at their best" (Cain, 2012, p. 111).

Even though these differences are evident at a behavioural level, Jung considered that these traits have a biological foundation (Jung, 1971), which paved the way for subsequent studies by other researchers. Cain delved into the scientific explanations behind the dichotomy of extroversion and

introversion by exploring the concepts of temperament and personality and how they influenced one another, a research first conducted by Jerome Kagan (2004), a developmental psychologist of the 20th century who dedicated his career to studying the emotional and cognitive development of children (Cain, 2012, p. 91). In this sense, the difference between Temperament and Personality must be made. Temperament "refers to inborn, biologically based behavioral and emotional patterns that are observable in infancy and early childhood" (Cain, 2012, p. 92), while personality is built upon that foundation that is susceptible to cultural influences and the personal experiences of individuals, including the implicit learning in those experiences and social comparison and selective attention (Cain, 2012; McCrae & Costa, 1999). Following this logic, Kagan concludes that each individual's amygdala – a complex structure located in the limbic system that controls one's basic instincts – controls one's high reactivity and low reactivity (Cain, 2012, p. 93). Connecting this theory with Jung's definitions, high reactivity would characterise introverts who would withdraw from external stimulation and low reactivity would characterise extroverts who would present a positive reaction to external stimulation (Cain, 2012). Furthermore, Eysenck speculated that this high and low reactivity was thought to be managed by a structure present in the brain named Ascending Reticular Activating System (ARAS) that has connections to the cerebral cortex and is responsible for the regulation of the amount of sensory stimulation that flows into the brain – if the channels were open, the individual would feel over-stimulated, presenting a high-reactive individual and therefore an introvert; if the channels were constricted, the individual would have a higher resistance to stimulation, presenting a low-reactive individual and, therefore, an extrovert (Cain, 2012).

Albeit these differences, Jung defended that everyone is extroverted and introverted to a degree, it is the predominance of one that determines one's personality type (Jung, 1971, p. 25), giving the idea that these two types are not mutually exclusive but rather present in a continuum (Laney, 2002). Jung conceptualised this theory with the intent to break down misconceptions then. However, the inherent differences of both psychological types still lead to misunderstandings, discord and misinformation even now (Jung, 1971). Nonetheless, extroversion was deemed to be the ideal personality type to the detriment of introversion (Blevins et al., 2021; Cain, 2012; Taylor, 2020), developing a cultural bias – a tendency to assign a meaning to personality traits based on dominant cultural norms that favour extroverted behaviours (Haddad et al., 2019) –, that enables society to perceive the latter personality type inaccurately (Laney, 2002). As was already stated, introverts have a preference for environments and experiences that are not overstimulating (Cain, 2012), as such they attempt to regulate their contact with the outside world by limiting "external input" (Laney, 2002, p. 22). This behaviour ends up being mistaken for self-absorption and egocentrism (Jung, 1971) when in fact is a reaction to their depleted energy and a need to turn inward to make sense of what they experienced (Laney, 2002). Besides self-absorption, there's still the assumption that introverts are antisocial or lack

social skills, being even mistaken for shyness or social anxiety (Cain, 2012; Laney, 2002). However, these concepts have differences among themselves. Shyness is reported to be a fear of rejection (Aron, 2022; Cain, 2012) in which the individuals present a lack of confidence in social situations (Laney, 2002); it is a mental and emotional state, not a trait that is always present in an individual's personality (Aron, 2022). Social anxiety ends up being a pathological and disabling form of extreme shyness (Cain, 2012). As such, introverts can also be shy and/ or have social anxiety, but these conditions are not directly linked to the temperament of introversion (Cain, 2012). Nonetheless, these assumptions transude to professional contexts, influencing the success of both introverts and extroverts due to the stereotypes already discussed (McCord & Joseph, 2020). However, both personality types may present advantages and disadvantages in a work environment.

As the work environment is composed of many personalities, researchers also found a way to study how the different personalities affect organisational outcomes. To assess that, many personality tests were developed, as was the case of the Big Five (McCord & Joseph, 2020; Taylor, 2020). The Big Five Model was firstly conceived as a model, being built upon many researcher's theories based on earlier trait theories (McCrae & Costa, 1999). Over the last five decades, researchers aimed to create a taxonomy of factors that would define groups of intercorrelated traits that would effectively define an individual's personality (McCrae & Costa, 1997, cited by Rothmann & Coetzer, 2003) until Norman (1963) came up with the commonly used labels used to this day (Barrick & Mount, 1991). Additionally, throughout the years, this model proved to have a robustness across different theoretical frameworks, different cultural backgrounds and consistent across adulthood, proving to be consistent, reliable and empirically valid to be also used as a personality test (Barrick & Mount, 1991; McCrae & Costa, 1999; Rothmann & Coetzer, 2003). Nonetheless, some researchers expressed their reservations towards this model, claiming that it oversimplifies personality and so fails to capture the complex essence of human nature (Barrick & Mount, 1991).

In sum, The Big Five model represents a structure of traits (Rothmann & Coetzer, 2003) that serves as a basis for a personality test commonly used in organisational contexts which aims to capture the basic psychological tendencies of an individual and how those tendencies manifest in order to help the individual fit the ever-changing social environment (McCrae & Costa, 1999). The Big 5 is composed of five traits that are divided into Task-oriented Traits and Interpersonal Traits (Colbert et al., 2014).

The Task-oriented Traits characterise leaders who are more likely to organise and plan work efficiently, solve problems effectively, and cooperate with teammates, excelling in goal achievement (Colbert et al., 2014). The Task-oriented Traits are Conscientiousness, Neuroticism (or Emotional Stability, at the opposite end of the spectrum) and Openness to Experience (Colbert et al., 2014; Hogan et al., 1996, cited by Rothmann & Coetzer, 2003).

Conscientiousness is associated with integrity, reflecting a thorough, organised, reliable, hardworking, persistent, and disciplined personality. Individuals with high conscientiousness thrive on goal accomplishment due to a strong sense of purpose and obligation, which translates into effective leadership skills (Barrick & Mount, 1991; Colbert et al., 2014; McCrae & Costa, 1999; Northouse, 2016; Rothmann & Coetzer, 2003). Emotional Stability refers to how individuals tend to think and react emotionally. Individuals low in emotional stability are referred to as neurotic and exhibit a tendency to feel fear, sadness, embarrassment, anger, depression, anxiety, insecurity, vulnerability and hostility (Northouse, 2016; Rothmann & Coetzer, 2003). These individuals often exhibit low self-esteem, irrational perfectionistic beliefs, and pessimistic attitudes, making them prone to irrational ideas, impulsive actions, and difficulty dealing with stress (Rothmann & Coetzer, 2003). Conversely, high emotional stability reflects calm, secure and consistent individuals who deal more effectively with conflicts and remain focused on their jobs longer, which translates into higher performance (Colbert et al., 2014). Lastly, Openness to Experience identifies flexible, adaptable, creative, daring and open-minded individuals (Colbert et al., 2014), while people low in Openness to Experience tend to be more conventional and conservative in their demeanour (Rothmann & Coetzer, 2003).

The Interpersonal Traits encompass Agreeableness and Extroversion. Individuals with the Agreeable trait are considerate, trusting and supportive, which is crucial in team settings as these individuals focus on maintaining social harmony and reducing group conflict (Colbert et al., 2014).

In sum, high scores on all these traits show a positive correlation with job performance (Rothmann & Coetzer, 2003). However, not all traits are equally linked to leadership effectiveness. According to Hogan & Kaiser (2005), Agreeableness does not have a positive relation with leadership effectiveness, while the other traits do. Openness to Experience is related to leadership effectiveness, especially in uncertain or more dynamic contexts (Colbert et al., 2014) since they are prone to adapt more easily to changing contexts. Leaders with high emotional stability present higher performance, as they are less prone to irrational ideas and better at stress management (Rothmann & Coetzer, 2003) and people high on Conscientiousness direct and channel employees toward goal attainment (Colbert et al., 2014). However, the link between extroversion and leadership is more extensively researched (Mitchell et al., 2022).

Extroversion, which is had as the ideal personality type in society (Cain, 2012; McCord & Joseph, 2020), also embodies the ideal employee, with organisations and managers placing big importance on extroverted strengths (Blevins et al., 2021; McCord & Joseph, 2020). Known for their cordiality and well-spoken nature, extroverts not only develop good relationships with co-workers (Laney, 2002) but are also perceived as smarter and more competent (Cain, 2012; McCord & Joseph, 2020), taking charge in team meetings while being vocal about their ideas and engaging in task coordination (Laney, 2002; Mitchell et al., 2022). Additionally, they are quick decision-makers who are comfortable with

multitasking and are quicker to finish their assignments, working well under pressure (Cain, 2012). Unlike introverts, who take on their assignments at a more deliberate pace and are less likely to share their insights or draw any attention to themselves (Laney, 2002). However, their rapidness is not a synonym for effectiveness since extroverts are more likely to make mistakes due to making rash decisions (Cain, 2012). Conversely, even though introverts are slower, they are also more persistent and adamant about solving problems accurately (Laney, 2002) but, due to their quiet nature, their performance is less visible than their extroverted counterparts (McCord & Joseph, 2020). Some articles have supported this evidence. Extroversion has been linked to good job performance individually (Kristof-Brown et al., 2005, cited by Mitchell et al., 2022) and in team settings (Colbert et al., 2014), particularly in jobs that involve social interaction, such as management and sales (Barrick & Mount, 1991). However, some studies revealed that an extroverted personality can present lower job performance in roles requiring attention to detail (Judge & Zapata, 2015, cited by Blevins et al., 2021) – roles in which introverts presumably excel, such as engineering, accounting, or research, due to their ability for deep problem-solving, strategic planning (Blevins et al., 2021). Still, there exists a positive bias towards extroversion and, consequently, introverts may be overlooked for opportunities for which they may be qualified (McCord & Joseph, 2020). Especially leadership positions (Mitchell et al., 2022).

2.2 Leadership Effectiveness and Extroversion & Introversion

Northouse (2016) discusses the complexity of defining leadership, presenting different concepts and theories that have evolved over time. Ultimately, Northouse defines leadership "as a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2016, p. 6). Leadership Effectiveness describes the leader's success in achieving those goals (Edelman & Knippenberg, 2018), also including the consequences of the leader's actions (Yukl, 1998, cited by Hendricks & Payne, 2007). In this process, the leader is primarily tasked with building and then maintaining effective teams to mobilise them towards a common goal, thereby achieving organisational effectiveness (Hogan & Kaiser, 2005). Leadership is therefore a complex and collective phenomenon with multiple dimensions (Avolio cited by Hogan & Kaiser, 2005; Northouse, 2016) which involves the leader, the followers, the work context, and culture, all of which contribute to organisational performance (Avolio et al., 2009). More extensively, the leader's personality influences the leadership style, which in turn affects the followers' attitudes and therefore the team dynamics, ultimately impacting organisational performance also based on the organisational culture (Hogan & Kaiser, 2005). Still, the context in which the team is built is decisive since effective Leadership is also contingent on the situation (Verkerk, 1990). According to Fiedler's Contingency Model, any type of leadership style can be effective and yet there is no universal effective leadership style, it is the situation that ultimately determines the

effectiveness of the leader's behaviour since particular situations require different actions (Verkerk, 1990).

Despite these dimensions that are part of the leadership phenomenon, the leader is a focal point as his role is imperative for leadership effectiveness since he is the one responsible for initiating, creating, and maintaining the relationship (Northouse, 2016).

Many scholars attempted to explain effective leadership by relying on the leader's personality (Northouse, 2016) since his experiences, values and personality shape their interpretation of the environment, which influences strategic choices, team performance and, ultimately, contributes to organisational effectiveness (Hambrick, 2007, cited by Colbert et al., 2014; Hogan & Kaiser, 2005). In sum, personality can indicate who might emerge as a leader and who can become an effective leader since personality influences the leadership behaviours exhibited by individuals, who have a role in shaping organisational performance (Colbert et al., 2014).

Hence, successful and effective leaders display traits of modesty, humility, persistence, self-effacement, competence, and commitment (Collins, 2001, cited by Hogan & Kaiser, 2005). Moreover, leaders must present intelligence, competence, self-confidence, integrity, determination, decisiveness, vision, and sociability (Hogan & Kaiser, 2005; Northouse, 2016) which will assist in the monitoring of operational processes, goal setting, problem-solving and diagnostic of individual or group needs (McCormick, 2001). Intelligence enables the development of important competencies (Northouse, 2016) needed for legitimacy and respect from the team (French & Raven, 1959, cited by Hogan & Kaiser, 2005). However, to gain respect from the team, the leader must also be confident in his competencies and display integrity to inspire confidence and transmit trust (Hogan & Kaiser, 2005; Northouse, 2016). Additionally, the leader must be determined to reach his goals (Northouse, 2016) by making good decisions. To do that, he needs to share his vision with the team to clarify roles, goals, and strategies (Hogan & Kaiser, 2005). Lastly, being sociable, which is characterized by friendliness, outgoingness, courtesy, tactfulness, diplomacy, and sensitivity to others' needs, promotes good interpersonal skills that lead to cooperative relationships (Northouse, 2016). It is this last characteristic that is often linked to extroversion.

As stated, personality types influence the behaviours of leaders (Colbert et al., 2014). The warm, assertive, and dominant nature of extroverts, which presumably allows them to possess effective social and verbal skills, fosters a charismatic demeanour, often associated with effective and thus successful leadership (Blevins et al., 2021; Grant, et al., 2011; Mitchell et al., 2022). Additionally, extroverts' modus operandi in the workplace often grants them informal leader status (Mitchell et al., 2022), enhancing their likelihood of being selected for leadership positions (Grant et al., 2011; Judge et al., 2002, cited by Blevins et al., 2021).

When in leadership roles, extroverts employ a leadership style characterised by active engagement with followers, building of networks, inspiration of the employees, provide of intellectual stimulation, while also offering individualised consideration to their employees and implementing ingratiation strategies, ending up receiving high ratings of effectiveness (Grant et al., 2011), which is often associated with the Transformational Leadership Style – a leadership style that describes an attentive leader who aims to create a connection with his followers with the intent to motivate them to reach their fullest potential (Northouse, 2016).

Despite the advantages of extroverted leadership (Grant et al., 2011), there's been little scientific evidence that corroborates the relationship between extroversion and leadership, and so leadership effectiveness (Judge & Zapata, 2015, cited by Karlsen & Langvik, 2021; Mitchell et al., 2022). In fact, extroverts tend to emerge as leaders due to their outgoing persona that is associated with leadership qualities; over time, they may lose their status if proven to be ineffective leaders or if leadership expectations aren't met (Bendersky & Shah, 2013, cited by Blevins et al., 2021; Karlsen & Langvik, 2021). According to Bergman et al. (2014) and Bergner et al. (2010), this is because specific facets of extroversion might better predict leadership effectiveness than the trait of extroversion itself, such as assertiveness, activity and gregariousness (Karlsen & Langvik, 2021).

Besides, introverted leaders can also prove to have their advantages in a changing business world (Grant et al., 2011). A study conducted by Grant (2011) concluded that extroverted leaders enhance group performance when employees are passive but are not successful when employees are proactive. Introverts, on the other hand, proved to be better leaders for proactive employees, while not being very successful with passive employees.

Extroverts' desire for social attention and recognition (Mitchell et al., 2022) and motivation for rewards like money and status, can provide a competitive advantage in leadership positions. However, they are adamant about doing things their way, risking losing good ideas from their employees (Cain, 2012), sometimes seeing these proactive behaviours as threats and responding by asserting dominance which compromises the engagement and commitment of the team and ultimately the group performance (Grant et al., 2011).

In contrast, introverted leaders, having a lack of interest in standing out in social contexts, proved to be more receptive to the initiatives and suggestions of their employees (Cain, 2012; McCord & Joseph, 2020), using them constructively to improve working methods and implement new strategies while improving group performance (Grant et al., 2011). This receptiveness fosters an environment where employees feel valued, developing their confidence and increasing their efforts for the success of the organisation (Grant et al., 2011).

Furthermore, introverted leaders have other competencies worthy of leadership. They possess an analytical and thoughtful leadership style characterised by building consensus and fostering inclusive

processes for diverse ideas (Blevins et al., 2021; Farrel, 2017). They are known for their considerate, cooperative nature and are often seen as good teachers (Laney, 2002). Moreover, introverted leaders tend to be more intrinsically motivated, leading to better alignment with team and organisational goals (Blevins et al., 2021). Also, introverts excel in thoughtful decision-making, preferring to thoroughly analyse information before reaching conclusions. This approach often leads to well-informed decisions that consider long-term implications (Kuofie et al., 2015, cited by Taylor, 2020). In addition to their deliberative nature, many introverts exhibit high levels of creativity and innovation which translates into generating original ideas and solutions, particularly when given time for solitary reflection and brainstorming (Korn, 2017, cited by Taylor, 2020). Introverted leaders also present an inclination for preparation and planning for their roles before engaging in activities or discussions. Their preference for thorough preparation enhances their ability to engage in strategic planning and detail-oriented tasks critical for leadership success (Hvidsten, 2016 cited by Taylor, 2020). In short, introverted leaders are believed to be prudent, have integrity, good judgement, and intellectual curiosity (Laney, 2002). Their analytical thinking and attention to detail contribute to effective leadership in managing uncertain and complex situations through thorough decision-making (Blevins et al., 2021; Farrel, 2017) while aided by an ability to adapt and navigate social situations as needed, even though they lean towards quieter environments (Gordon, 2016, cited by Taylor, 2020). Some of their weaknesses may be forgetting to communicate expectations, failing to delegate and not realising the importance of praise and rewarding good work (Laney, 2002). However, by leveraging their strengths in decision-making, creativity, preparation, and adaptability, introverted leaders may also present unique abilities in driving organisational success (Taylor, 2020).

In sum, leadership effectiveness describes the success of mobilising a team in accomplishing organisational goals (Edelman & Knippenberg, 2018). The literature emphasises leaders' traits as key factors in explaining this effectiveness since personality underpins why individuals seek leadership positions and their behaviours once they occupy those positions (Colbert et al., 2014). Extroversion has been extensively linked to leadership emergence, yet few studies have connected this personality trait with leadership effectiveness (Blevins et al., 2021; Cain, 2012; Mitchell et al., 2022). On the basis of that, lies the biased approach surrounding personality traits, perpetuated in the personality tests used in research (Blevins et al., 2921). The positive connotation of extroversion has consequently led to a negative perception of its counterpart, introversion, suggesting limitations to performing in certain roles, including being effective leaders (Blevins et al., 2021). However, it can be concluded that even though both personalities can present weaknesses when in leadership positions, both introverted and extroverted leadership styles bring unique strengths that contribute to organizational success (Cain, 2012; Farrel, 2017).

As stated, extrovert leaders might have an innate assertiveness that commands dominance and excel in environments where social engagement is critical, being able to build rapport with anyone while inspiring them (Cain, 2012; McCord & Joseph, 2020; Mitchel et al., 2022). However, they may struggle in situations requiring deep analytical thinking or handling proactive employees (Grant et al., 2011), needing to humble their methods if showing too much arrogance – which is the opposite of the named traits that describe effective leaders (Collins, 2001, cited by Hogan & Kaiser, 2005). In contrast, introverted leaders may find shortcomings in conflicting environments in which they might have to speak up. However, on the plus side, they exhibit traits such as analytical thinking, humility, and a tendency to listen to and value the ideas of their team members (Blevins et al., 2021; Laney, 2002). They create inclusive environments that foster employee confidence and proactive contributions (Grant et al., 2011) due to their thoughtful and considerate nature (Blevins et al., 2021; Farrel, 2017). Moreover, their intrinsic motivation and commitment to organisational goals confer an ability to manage complex and uncertain situations which contributes to sustained leadership effectiveness (Blevins et al., 2021).

Concluding, both extroverted and introverted personality types, apart from their limitations, can constitute effective leaders on their own terms. While extroverted leaders may excel in environments that demand outward assertiveness and rapid decision-making, introverted leaders demonstrate effectiveness in settings that prioritise thoughtful deliberation, consensus-building, and long-term strategic planning. So, both personality types possess unique attributes that can contribute to leadership effectiveness when leveraged appropriately, therefore, supporting the hypothesis:

H1.a: Extroversion is positively related to leadership effectiveness
H1.b: Introversion is positively related to leadership effectiveness

Ultimately, despite both personality types holding the potential to be effective leaders, effective leadership transcends personality stereotypes. Both introverted and extroverted leaders can thrive and contribute meaningfully to organisational success based on their respective strengths (Northouse, 2016). It is however one's skills – despite being an extrovert or introvert – that make the difference in achieving leadership effectiveness; particularly, communication skills.

2.3 Communication Skills and Extroversion & Introversion

Personality depicts an important aspect of leadership, however for a leader to be successful he must possess knowledge and competencies to accomplish goals and perform his job effectively (Northouse, 2016). To assess how competencies influence leadership effectiveness, diverse models were developed including the Model of Hogan and Warrenfeltz (Hogan & Warrenfeltz, 2003, cited by Hogan & Kaiser,

2005), the Three Skills Approach (Katz, 1955, cited by Northouse, 2016) and Mumford Skills Model (Mumford et al., 2000, cited by Northouse, 2016).

The Model of Hogan and Warrenfeltz identifies four broad classes of managerial competencies leaders should possess, such as intrapersonal skills, which relate to one's values and ability to control emotions and behaviours; interpersonal skills, concerning the ability to develop and maintain relationships in a work environment; business skills, which concerns the technical knowledge and skills needed in the field the leader operates; and leadership skills, that reflect the ability to build effective teams and provide direction and support to accomplish goals (Hogan & Warrenfeltz, 2003, cited by Hogan & Kaiser, 2005). The Three Skills Approach identifies three types of essential skills for leaders: technical skills, which reflect the knowledge and competence in the specific field in which the organisation operates; human skills, which refer to the ability to work effectively with people, enabling leaders to build relationships with their followers based on mutual understanding, thus facilitating the mobilisation towards goal accomplishment; and conceptual skills, which involve understanding the organisational culture and vision, and designing strategies to achieve organisational goals (Katz, 1955, as cited by Northouse, 2016). Lastly, the Mumford Skills Model examines the capabilities that enable effective leadership by evaluating the relationship between a leader's knowledge and skills and their performance. In this model, Mumford et al. (2000) contemplate the individual attributes and core competencies needed for effective leadership, which are influenced by career experiences and external factors that do not depend on the leader. Individual attributes support the development of leadership competencies, which include general cognitive abilities, competencies learned through experience, and motivation to accomplish the organisation's goals. The core competencies refer to problem-solving skills and social judgement skills, including knowledge about the field and how to leverage both skills to reach good solutions. If leaders present these attributes and competencies, the model states that they will display good performance while effectively engaging in problem-solving within the organisation, thus leading to positive leadership outcomes (Mumford et al., 2000, cited by Northouse, 2016).

Thereby, it is possible to assume that effective leadership is a byproduct of a diverse range of competencies – technical skills and interpersonal skills, besides leadership itself. Technical skills reflect the business acumen an individual must possess to be successful. However, that know-how must then be transferred to the team he leads to convey a vision and align the team, promote collaboration towards problem-solving and achieve organisational success (Northouse, 2016). To do that, interpersonal skills, which refer to the ability to build relationships, are needed to build cohesive teams (McCornack, 2016). As such, communication skills emerge as a common thread underlined in all models, being a foundational and fundamental component of such competencies, that enable their practical application to achieve successful leadership outcomes.

Communication is a dynamic and goal-driven process through which individuals use messages to convey meanings within and across specific contexts, influencing thoughts, emotions, behaviours and relationships while aiming to create a shared reality between the sender and receiver (Hackman & Johnson, 2013; Fairhurst & Connaughton, 2014; McCornack, 2016). The success of creating a shared reality depends on the interpretation, understanding and agreement upon the meanings of the communicated messages, which can be influenced by cultural background, previous experience, interest level, and the communicator's skills (Hackman & Johnson, 2013). However, according to the Transactional Communication Model, the role of senders and receivers is constantly interchanging since all parties constantly exchange messages and feedback, collaboratively creating meanings (Streek, 1980, cited by McCornack, 2016), which also involves the negotiation of shared interpretations and understandings (Hackman & Johnson, 2013). Therefore, effective communication skills are essential. Communication skills are defined by repeatable goal-directed behaviours and patterns that dictate how effectively an individual presents information using verbal and nonverbal communication. This includes the ability to speak concisely, confidently and enthusiastically while using body gestures and appropriate nonverbals to convey information (Mitchell et al., 2022). The effectiveness of this skill is measured in the success of accomplishing the determined interpersonal goals (McCornack, 2016), which can also translate into organisational settings.

Organisations are constituted through communication (Fairhurst & Putnam, 2004, cited by Fairhurst & Connaughton, 2014) and their environment can be strengthened or weakened by how people communicate (Laney, 2002). Thereby, communication is an important skill for all constituents of an organisation to possess, including leaders (Mitchell et al., 2022).

As Fairhurst and Sarr (1996) stated, leadership is best understood from a communication perspective, as leadership is fundamentally a communication-based activity and leaders use language as their most reliable and effective resource for achieving desired outcomes (Hackman & Johnson, 2013).

Recalling the definition of leadership, which describes a process whereby an individual mobilises a group to achieve common goals (Northouse, 2016), it is evident that communication plays a crucial role in this process (Riggio et al., 2003). Through communication, leaders influence the attitudes and behaviours of others to meet group needs and achieve established goals (Hackman & Johnson, 2013). Concurrently, leadership and communication are deeply interconnected. Through communication, leaders aim to create a shared reality and develop distinctive group cultures so then they can achieve their ultimate goals (Hackman & Johnson, 2013). So, leaders spend significant amounts of time crafting and conveying messages to followers (Hackman & Johnson, 2013), in which they provide information, give instructions, coordinate and give feedback (Mintzberg, 1973, cited by Riggio et al., 2003). In short, this skill facilitates knowledge transfer, task coordination and plan articulation while influencing followers to execute the necessary tasks (Mitchell et al., 2022). Moreover, communication skill enables leaders to

create effective interactions and influence others while managing relationships, increasing the perceptions of leadership (Mitchell et al., 2022).

Beyond the task-oriented side of communication, this skill also serves as the basis for developing good relationships, which is a crucial factor for effective leadership (Riggio et al., 2003). Good leader-follower relationships shape the morale and satisfaction of workers, which is linked to their overall productivity and performance and thus leadership effectiveness (Northouse, 2016; Riggio et al., 2003). Thus, leaders must be mindful of their downward communication, this is, on how they communicate with their team. Competent downward communication involves leaders communicating clearly and concisely without relying on their power while being positive, respectful, and empathetic (Northouse, 2016). In this sense, it is also important to consider the social and emotional components of communication skills, especially in the establishment of good relationships (Riggio et al., 2003). According to Bass (2002) and Zaccaro (2002), these emotional and social components of communication skills represent the "people skills" possessed by effective leaders (Riggio et al., 2003). Communication skills comprise six basic skills: emotional expressivity, emotional sensitivity, emotional control, social expressivity, social sensitivity, and social control – where expressivity refers to the encoding of messages and sensitivity to the decoding (Riggio, 1986, cited by Riggio et al., 2003). The emotional component of communication skills – this is, Emotional Intelligence – grants the leader the ability to recognise, understand, regulate and manage their own emotions (Riggio et al., 2003; Salovey & Mayer, 1990, cited by Edelman & Knippenberg, 2018). This skill then endows the leader with the ability to self-monitor and interpret social cues and social interactions, enabling the individual to adapt to the context he is in (Dobbins et al., 1990, cited by Riggio et al., 2003) and act in the best way according to the given situation and social environment (Northouse, 2016). This competence ends up enabling the leader to establish a good relationship with his followers while understanding their perspectives and motivating them to reach their full potential and accomplish the established goals (Riggio et al., 2003). Furthermore, the establishment of good relationships with followers and thus leadership effectiveness depends on the leader's willingness to communicate and engage in communication situations (McCroskey & Richmond, 1985, cited by Hackman & Johnson, 2013). To do so, leaders must develop their communication skills, in part by practice, which will increase their confidence and encourage them to engage in frequent interaction (Hackman & Johnson, 2013).

As noted, extroverts and introverts differ in nature; the first ones thrive in social settings, while the second ones prefer more peaceful atmospheres (Cain, 2012). These preferences allow for misconceptions around communication to arise, in which extroverts are perceived to have innate communication skills – and thus making effective leaders – (Mitchell et al., 2022), while introverts are seen as more socially awkward and solitary (Blevins et al., 2021). However, even though extroverts do present an inclination to engage in social interactions, the concept of this personality trait does not

encompass any skill in communication since skill is something that can be attained and developed over time despite one's personality type (Mitchell et al., 2022). Despite that, personality does affect behaviour and so extroverts do have different communication styles from introverts (Laney, 2002).

Extroverts actively engage with others since they thrive and get energised by the act of interaction (Cain, 2012; Farrel, 2017, cited by Taylor, 2020; Laney, 2002). According to Laney (2002), extroverts tend to be spontaneous and quick communicators who engage easily in both one-on-one and group settings, possessing a keen discernment in decoding social cues (Cain, 2012). They also express their opinions and ideas freely, often processing information while they doing so, interacting with others to reach conclusions (Hvidsten, 2016, cited by Taylor, 2020; Laney, 2002). On the downside, extroverts often seek attention and sometimes seek to dominate the conversation (Grant, 2013, cited by Taylor, 2020; Grant, 2014) since they often prefer talking over listening (Schmidt, 2016, cited by Taylor, 2020), engaging in arguments in which they want their opinion to be heard over their counterpart arguing in a win-lose style (Cullen-Lester et al., 2016, cited by Taylor, 2020; Grant, 2014; Laney, 2002). Consequently, they sometimes are found in the middle of conflicts, creating challenging relationships in team environments due to their dominant communication style (Gordon, 2016, cited by Taylor, 2020; Grant et al., 2011). Contrariwise, introverts tend to prioritise meaningful and purposeful communication in small groups over small talk in large settings (Abrams, 2017, cited by Taylor, 2020; Cain, 2012; Laney, 2002), in which they can communicate at a slower pace since they need to retrieve and ponder their thoughts and feelings to come up with opinions, ideas and suggestions (Dossey, 2016, cited by Taylor, 2020; Laney, 2002). This is why they often prefer written communication since it gives them time to carefully craft their messages (Laney, 2002). Moreover, introverts are more skilled in active listening, always considering different points of view, and tending to absorb information before responding thoughtfully (Gordon, 2016, cited by Taylor, 2020; Laney, 2002). This approach to communication can set the basis for strong and trust-based relationships with team members, in which their calm and collected demeanour can be reassuring in stressful times, helping maintain a composed and stable environment.

Taking from these differences in communication style, in which Extroverts tend to be swift talkers and therefore seen as more intelligent and competent (Cain, 2012; McCord & Joseph, 2020), this personality type ends up being linked to leadership effectiveness (Mitchell et al., 2022) in favour of introverts, that are seen as more quiet and aloof (Blevins et al., 2021; Cain, 2012; Laney, 2002). Mitchell et al. (2022) conducted a research that proved that extroversion does not predict leadership; it is effective communication skills that do. As already stated, communication skills can be acquired by extroverts and introverts and, presumably, both can be effective leaders if both personality types have good communication skills. Notwithstanding, both can have their limitations.

Leadership relies on good communication skills to be effective (Mitchel et al., 2022). Extrovert leaders might present good communication skills in both aspects mentioned – task orientation and relationship building. Extroverts are not afraid to speak up and voice their opinions, and they have an inclination to assert dominance (Cain, 2012; Laney, 2002; Mitchell et al., 2022). Therefore, if they possess good communication skills, they will easily mobilise the team they are leading to achieve the proposed goals. Furthermore, their sociability and charismatic demeanour enable extroverts to build good relationships with team members, inspiring them to achieve their goals (Cain, 2012). On the downside, if they possess poor communication skills and feel threatened by a proactive employee, extroverts might adopt an aggressive communication style, sometimes bordering on bullying towards the team (Blevins et al., 2021). Introverts, on the other hand, excel in listening skills which is a pivotal component of communication skills (Laney, 2002). They firstly worry about building consensus and fostering inclusive processes where their team can freely share their opinions to reach better solutions (Taylor, 2020), which promotes a trust-based relationship. So, while extroverts may initially appear to have an advantage in leadership due to their outgoing nature, effective communication is a skill that both introverts and extroverts can develop (Mitchell et al., 2022). Extroverts may excel in verbal communication and social interactions, but introverts can leverage their skills in active listening and thoughtful communication to foster deeper connections and understanding (Cain, 2012; Laney, 2002). In this sense, it is believed when leaders possess strong communication competencies, regardless of personality type, leaders are better equipped to influence, motivate, and build relationships with their followers, ultimately achieving leadership effectiveness (Hackman & Johnson, 2013; Northouse, 2016):

H2.a: The competence of communication mediates the relationship between extroversion and leadership effectiveness

H2.b: The competence of communication mediates the relationship between introversion and leadership effectiveness

2.4 Research Model

Considering the proposed hypothesis, the following Research Model was developed and tested:

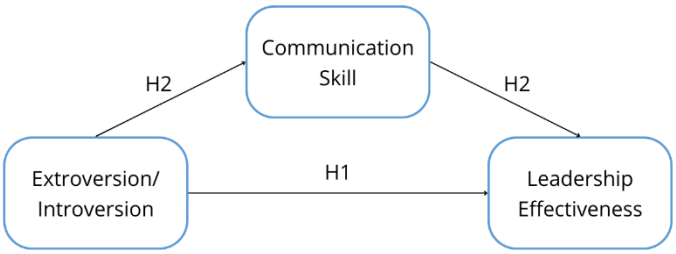

Figure 2.1 – Research Model

3. Methodology

3.1 Procedure

The present research adopted a quantitative approach in which two questionnaires were employed to perform the data collection. The first questionnaire was directed to team leaders, aiming to assess their personality type, leadership effectiveness, and communication skills. To minimise biased data, as the first questionnaire comprised three self-assessment tests, a second questionnaire was created and directed to the team members of each leader who responded to the first questionnaire. To enable data cross-checking, leaders had to complete their questionnaire first, create an identification key – also ensuring the anonymity of each respondent – and send both the second questionnaire and their identification key to their team members.

The questionnaires were developed through Microsoft Forms in Portuguese, English and French, with an estimated completion time of 10 to 15 minutes each. The distribution of the questionnaire utilised three different sampling methods, sometimes simultaneously: Convenience Sampling, where participant recruitment is based on the availability of resources (Landers & Behrend, 2015); Snowball Sampling, in which individuals meeting specific criteria are identified and then select other individuals who also fit the criteria to participate (Berndt, 2020); and Purposive Sampling, which describes a technique that relies on the researcher's judgment, which is based on analytical, on analytical, logical, or theoretical grounds, to select participants in order to meet the specific needs of the project (Berndt, 2020). Based on this, Convenience Sampling and Snowball Sampling were simultaneously employed in three ways by resorting to friends and LinkedIn: first, some friends were asked to complete the questionnaires in their work settings, particularly those who held leadership positions, while others passed the questionnaires to their bosses; second, friends shared the questionnaires with other friends, relatives, and acquaintances who held leadership positions in their organisations; and third, LinkedIn was used to filter and contact people in leadership positions, asking them to answer the first questionnaire and then share a second one with their team. In addition to these approaches, Purposive Sampling was employed throughout, as individuals were specifically selected based on the criterion of holding leadership roles. This data collection took place from March to July 2024.

3.2 Instruments

3.2.1 Questionnaire 1: "Supervisors – Introversion and Extroversion in the Workplace"

The first questionnaire directed at Supervisors was named "Supervisors – Introversion and Extroversion in the Workplace" and was divided into seven sections. Upon clicking the link, respondents were met with the first section, which included an introduction that explained the scope, objectives, and

procedures of the research. Additionally, the introduction contained information regarding how confidentiality would be guaranteed. At last, respondents were presented with an Informed Consent form, which they had to check to indicate their understanding and agreement with all the information provided. The second section, still part of the introductory set, required the creation of an identification key to enable the cross-checking of data, while still guaranteeing the anonymity of the respondent. The Identification Key was created according to the following steps: a) Second letter of your first name, b) Third letter of your last name, c) Last two digits of your birth year (e.g., 77), d) First letter of your mother's first name, e) In the end, you should obtain a key identical to "AR99R".

Following these introductory sections, three sections were created, comprising three self-assessment tests related to the three variables under study: the third section contained The Big Five Personality Test; the fourth section was composed of a test on Communication Skills; and the fifth section comprised the Leadership Effectiveness test.

In section six, respondents were asked to provide sociodemographic data, including: gender, age, education level, years of experience in the field, current position and tenure in current position. The last section contained a thank you note and a reminder of how to create the identification key to also remind the leader to send the second questionnaire to the team.

3.2.2 Questionnaire 2: “Employees – Introversion and Extroversion in the Workplace”

The second questionnaire, named “Employees – Introversion and Extroversion in the Workplace”, was structured similarly to the first one, comprising six sections. Like the first questionnaire, the first section provided an introductory note explaining the scope, objectives, and procedures of the research, along with information about confidentiality, finalising with an informed consent form. The second section requested the identification key, which was created and provided by the leaders after they had completed the first questionnaire.

Sections three and four contained a test each, in which the employees were asked to evaluate their leaders' performance concerning the variables under study: communication skills and leadership effectiveness. Section five included a set of questions regarding the respondent’s job satisfaction, aiming to understand if their satisfaction influenced their evaluation of their leader. In the final section, employees were asked to provide sociodemographic data, including gender, age, education level, years of experience in the field, current position, tenure in current position, and tenure working under the supervision of the current supervisor.

3.3 Measures

3.3.1 The Big Five Personality Test

To assess the leader's personality, The Big Five Inventory (BFI) self-assessment test developed by Donahue and Kentle (1991) that presents a reliability of 0,714 was used (John & Srivastava, 1999). This test comprises forty-four questions that aim to assess an individual's personality across five dimensions: Extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. Each question is a short phrase representing the prototypical characteristics of each dimension, and the items are randomly ordered within the test, in which the respondent would have to answer using a 5-point Likert Scale, where 1 means "Disagree Strongly" and 5 means "Agree Strongly". In this particular study, only the items related to Extroversion were used. The dimensions of Extroversion, counted with eight questions (e.g., "I see myself as someone who is talkative") in which three of them were reverse-scored items (e.g., "I see myself as someone who is reserved").

3.3.2 Communication Skills Self-assessment

To assess the leader's communication skills, the Adapted Communicative Competence Questionnaire (CCQ) created by Monge et al. (1982) for organisational contexts was used (Phillips, 2017). This test evaluates two dimensions of competence needed in the workplace: Encoding, which entails the understanding of expressive language and is assessed through 6 items (e.g., "I have a good command of the language"; and Decoding, which refers to the receptive skills such as listening and attentiveness, assessed through four items (e.g., "I am a good listener") (Monge et al., 1982, cited by Phillips, 2017). In this self-assessment, respondents answered these ten questions based on their general behaviour using a 7-point Likert scale, where 1 means "Strongly Disagree" and 7 means "Strongly Agree" and this test presents a reliability of 0,633.

3.3.3 Leadership Effectiveness Self-assessment

The Leadership Effectiveness Assessment used was developed by John C. Maxwell (1995). In this test, respondents answered twenty-five questions (e.g., "I influence others") based on their perceived attributes, skills and qualities, through a 5-point Likert scale where 1 means "Never" and 5 means "Always". This test presented a reliability of 0,862.

3.3.4 Communication Skills Self-assessment

The assessment of the leader's communication skills as perceived by their team was made using a test adapted from Abelsen et al. (2015), presenting a 0,954 reliability. This test includes six questions, such as "My superior provides sufficient amounts of useful information that I understand.", with respondents

answering based on a 5-point Likert scale, where 1 means “Strongly Disagree” and 5 means “Strongly Agree”.

3.3.5 Leadership Effectiveness Employees Assessment

The questionnaire answered by each leader’s team regarding their leader’s effectiveness was created by Reis and Lopes (2018). This questionnaire aimed to assess how team members perceived the effectiveness of their direct leaders by answering ten questions (e.g., “Your boss has an attitude that makes you respect him/ her”) through a 7-point Likert scale, where 1 means “Never” and 7 means “Always”. This test presented a reliability of 0,975.

3.4 Sample

The sample from the first questionnaire counts with 172 supervisors from different fields (4.65% Administrative, 1.74% Consulting, 5.23% Finance & Accounting, 4.07% Healthcare, 9.30% Human Resources, 8.72% IT, 9.88% Logistics, 9.88% Marketing & Sales, 5.81% Product and Project Management, among others). The sample is composed of 54.7% females (*n = 94*) and 44.8% male (*n = 77*) with an age range from 21 to 64 years old, in which the average age was 39.08 with a standard deviation of 9.945. However, one respondent preferred not to answer to these questions (Table 3.1).

Regarding Education Level, 80.2% of the respondents have completed higher education. Specifically, 2.3% possess a TeSP (*n = 4*); 36% possess a bachelor's degree (*n = 62*); 14.5% possess postgraduate studies (*n = 25*); 26.2% have a master’s degree (*n = 45*); and 1.2% have a PhD (*n = 2*). In sum, most of the respondents have either a bachelor's or master’s degree. However, 16.9% have only a high school diploma (*n = 29*) and 2.9% did not complete high school (*n = 5*) (Table 3.1). Further analysis shows that people from all ages pursued higher education, however middle-aged male respondents have a predominance in lower education levels in comparison to the other respondents, while the women in this sample denote higher levels of education (Table 3.2 and Table 3.3).

In terms of professional experience, the majority of respondents (74.4%) have more than five years of experience in the field. Most commonly, respondents have 3 to 5 years of experience (20.9%), followed by those with 25+ years of experience in the field (16.9%), with only 4.7% having an experience of 1 to 2 years. Additionally, most of the respondents have been in their current position for 3 to 5 years (27.3%) and only 2.3% have been in their current position for 25+ years (Table 3.1). Further analysis reveals that individuals with shorter tenures in their current positions have approximately 4 years of experience in the field before assuming their leadership roles. However, people with shorter tenures generally possess higher levels of education compared to those with longer tenures (Table 3.4).

Table 3.1 – Leader's sample characteristics

Variables	Distribution	(n = 172) Frequency or Min-Max	M or % ± SD
Gender	Female	94	54,7%
	Male	77	44,8%
	Did not respond	1	6,00%
Age (Years)	21 – 64	171	39,08 ± 9,945
	Did not respond	1	6,00%
Education Level	9th Grade	5	2,90%
	High School	29	16,9%
	TeSP	4	2,30%
	Bachelor's Degree	62	36,0%
	Postgraduate	25	14,5%
	Master's Degree	45	26,2%
	PhD	2	1,2%
Fields of Work	Administrative	8	4,65%
	Consulting	3	1,74%
	Finance & Accounting	9	5,23%
	Healthcare	7	4,07%
	Human Resources	16	9,30%
	IT	15	8,72%
	Logistics	17	9,88%
	Marketing & Sales	17	9,88%
	Project & Product Management	20	5,81%
	Others	70	40,70%
Years of Experience in the Field	1 to 2 Years	8	4,70%
	3 to 5 Years	36	20,9%
	6 to 9 Years	28	16,3%
	10 to 14 Years	26	15,1%
	15 to 19 Years	25	14,5%
	20 to 24 Years	20	11,6%
	25 years +	29	16,9%
Tenure in Current Position	Less than a year	25	14,5%
	1 to 2 Years	43	25,0%
	3 to 5 Years	47	27,3%
	6 to 9 Years	23	13,4%
	10 to 14 Years	17	9,90%
	15 to 19 Years	4	2,3%
	20 to 24 Years	9	5,2%
	25 years +	4	2,3%

Table 3.2 – Leader's Age and Education Level

Age								
Education Level	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
9th Grade	5	38,60	7,861	3,516	28,84	48,36	30	45
High School	29	39,00	8,611	1,599	35,72	42,28	24	58
TeSP	4	47,50	13,026	6,513	26,77	68,23	28	55
Bachelor's Degree	62	39,69	10,703	1,359	36,98	42,41	21	64
Postgraduate	25	40,40	9,962	1,992	36,29	44,51	23	58
Master's Degree	44	36,57	9,544	1,439	33,67	39,47	24	57

PhD	2	44,00	4,243	3,000	5,88	82,12	41	47
Total	171	39,08	9,945	,761	37,57	40,58	21	64

Table 3.3 – Leader's Gender and Education Level Crosstabulation

	Education Level							
Gender	9th Grade	High School	TeSP	Bachelor's Degree	Postgrad.	Master's Degree	PhD	Total
Male	3	16	3	26	10	19	0	77
Female	2	13	1	36	14	26	2	94
Total	5	29	4	62	24	45	2	171

Table 3.4 – Leader's Crosstabulations between Tenure in Current Position and Years of Experience in the Field and Tenure in Current Position and Education Level

		Tenure in Current Position in Years								
		Less than a year	1 to 2	3 to 5	6 to 9	10 to 14	15 to 19	20 to 24	25 +	Total
Years of Experience in the Field	1 to 2	2	6	0	0	0	0	0	0	8
	3 to 5	13	10	13	0	0	0	0	0	36
	6 to 9	3	7	12	6	0	0	0	0	28
	10 to 14	2	8	6	5	5	0	0	0	26
	15 to 19	3	4	9	3	4	2	0	0	25
	20 to 24	1	3	6	3	3	1	3	0	20
	25 +	1	5	1	6	5	1	6	4	29
Total		25	43	47	23	17	4	9	4	172
Education Level	9th Grade	0	1	1	1	2	0	0	0	5
	H. School	6	5	7	6	1	0	3	1	29
	TeSP	0	2	0	0	0	1	0	1	4
	Bachelor's	9	13	16	9	8	1	6	0	62
	Postgrad.	2	9	9	1	2	1	0	1	25
	Master's	8	12	13	6	4	1	0	1	45
	PhD	0	1	1	0	0	0	0	0	2
Total		25	43	47	23	17	4	9	4	172

The sample from the second questionnaire initially counted with 107 responses, however, eight of them had to be eliminated – some respondents provided a wrong identification key or an identification key with no match to the first questionnaire –, only remaining 99 answers from the employees working under the supervision of the inquired leaders. This sample reflects a predominantly female young workforce. 63.63% of the total of the sample (*n = 63*) are female, while 35.36% are male (*n = 35*). However, 1.01% of the respondents preferred not to disclose their gender (*n = 1*). The age of the respondents ranges from 19 to 64 years old, however, the employees are predominantly between the ages of 25 to 35, comprising 50.5% of the sample (*n = 50*). Still, there is a notable cluster around the ages of 25 to 27 making 21.21% of the sample. Additionally, there are some employees from 19 to 24 years (*n = 7*) which comprises 7.07% of the sample and some older employees from 36 to 64 years old which comprise 36.36% (*n = 36*). 6.06% did not respond. Regarding education level, 75.75% of the

employees have acquired higher education qualifications, which entails 40.4%, possess a bachelor's degree, followed by post-graduate degree (16.16%; *n = 16*) and 13.13% hold a master's degree (*n = 13*). A smaller percentage (6.06%) holds a TeSP qualification (*n = 6*). Still, a significant portion of the sample (21.21%) has completed secondary education (*n = 21*) but, nonetheless, some of them still only completed the 9th grade 3.03% (*n = 3*). With a relatively young workforce but a well-educated sample regardless, 64.65% of the sample have 3 to 9 years of experience in the field (*n = 37*). Only 10.1% have less than one year of experience, while 12.12% have over 25 years of experience. However, most employees do not have a long tenure in their current position – 46.94% (*n = 46*) have been in their position no longer than two years. 18.37% have a tenure of 3 to 5 years (*n = 18*) and 14.29% have a tenure of 6 to 9 years (*n = 14*), which comprises 32.66% of the population. Then, few people have a higher tenure than that since 20.2% of the sample (*n = 20*) have been in their current position for more than 10 years. Despite the tenure in their current position, the data implies that some employees have been in the same position but have worked under the supervision of different leaders. The majority of employees (57.57%) have been working with their current supervisor for up to 2 years (*n = 57*) and 29.29% for about 3 to 5 years (*n = 29*); only a small percentage (1.01%) have worked with the same supervisor for over 25 years (*n = 1*). All of this information is present in the table below (Table 3.5).

Table 3.5 – Employees sample characteristics

		(n = 99)	
Variables	**Distribution**	**Frequency or Min-Max**	**M or % ± SD**
Gender	Female	63	63,63%
	Male	35	35,36%
	Did not respond	1	1,01%
Age (Years)	19 – 64	93	25,80 ± 19,90
	Did not respond	6	6,06%
Education Level	9th Grade	3	3,03%
	High School	21	21,21%
	TeSP	6	6,06%
	Bachelor's Degree	40	40,40%
	Postgraduate	16	16,16%
	Master's Degree	13	13,13%
	PhD	0	0,0%
Fields of Work	Administrative	7	7,07%
	Consulting	9	9,09%
	Finance & Accounting	7	7,07%
	Healthcare	17	17,17%
	Human Resources	13	13,13%
	IT	4	4,04%
	Logistics	7	7,07%
	Marketing & Sales	10	10,10%
	Project & Product Management	11	11,11%
	Others	14	14,14%
	Less than a year	10	10,1%
	1 to 2 Years	17	17,17%

Years of Experience in the Field	3 to 5 Years	19	19,20%
	6 to 9 Years	18	18,18%
	10 to 14 Years	10	10,10%
	15 to 19 Years	8	8,08%
	20 to 24 Years	5	5,05%
	25 years +	12	12,12%
Tenure in Current Position	Less than a year	22	22,22%
	1 to 2 Years	24	24,24%
	3 to 5 Years	18	18,18%
	6 to 9 Years	14	14,14%
	10 to 14 Years	6	6,06%
	15 to 19 Years	5	5,05%
	20 to 24 Years	4	4,04%
	25 years +	5	5,05%
Tenure Working for Current Supervisor	Less than a year	25	25,25%
	1 to 2 years	32	32,32%
	3 to 5 years	29	29,29%
	6 to 9 years	10	10,10%
	10 to 14 years	2	2,02%
	25 + Years	1	1,01%

4. Results

4.1 Descriptive Statistics and Correlations

Before proceeding to the hypothesis testing, the mean and standard deviation of each composite variable – regarding the variables referring to supervisors and employees – was calculated, as for the correlations among each variable.

Extroversion had a minimum value of 2.00 and a maximum value of 5.00, with 3.80 of mean and 0.700 of standard deviation while Introversion ranges from 1.00 to 4.00 with a mean of 2.20 and a standard deviation of 0.700. This suggests that respondents on average lean more towards extroversion, however not exclusively. It should be noted that extroversion and introversion exist in a continuum and that respondents, even though leaning more towards extroversion, will always have an introverted side (Cain, 2012). For leadership effectiveness, the minimum value was 2.92 and the maximum value was 4.80, with a mean of 4.14 and a standard deviation of 0.33 while for communication skill the minimum value was 4.00 and the maximum value was 6.70 with a mean of 5.68 and a standard deviation of 0.48 (Table 4.1). These scores reflect that respondents generally rated themselves highly on leadership effectiveness and communication skills. In sum, respondents have a moderate inclination towards extroversion, even though with a slight introverted tendency, and they are effective leaders with good communication skills.

Table 4.1 – Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Extroversion	172	2,00	5,00	3,8038	,70010
Introversion	172	1,00	4,00	2,1962	,70010
Communication Skill	172	4,00	6,70	5,6779	,48193
Leadership Effectiveness	172	2,92	4,80	4,1423	,33042
N	172				

After assessing the descriptive statistics regarding each variable, the correlation between each composite variable was assessed (Table 4.2). Since extroversion/ introversion are considered opposing ends of the same spectrum of personality types and the Introversion values were obtained from the reverse-scored items of Extroversion, in this table it is established a perfect negative correlation between these two variables ($r = -1.000$; $p < 0.001$) reflecting they are opposing traits. Furthermore, Extroversion presents a moderate positive correlation with leadership effectiveness ($r = 0.400$; $p < 0.001$) and communication skill ($r = 0.352$; $p < 0,001$), meaning individuals who score higher on extroversion are more likely to be perceived as effective leaders with higher communication skills. Conversely, as Introversion presents the reverse scores of extroversion, its correlation with leadership effectiveness ($r = -0.400$; $p < 0.001$) and communication skill ($r = -0.352$; $p < 0.001$) is a moderate negative correlation

meaning that individuals who score high on introversion tend to have lower communication skills and are less likely to be perceived as effective leaders. Moreover, there is a moderate to strong positive correlation between communication skills and leadership effectiveness (r = 0.482; p < 0.001) revealing that not only do communication skills contribute to effective leadership, but individuals with higher communication skills are more likely to be perceived as effective leaders.

Table 4.2 – Correlations between leader's composite variables

		Extroversion	Introversion	Communication Skill	Leadership Effectiveness
Extroversion	Pearson Correlation	1	-1,000**	,352**	,400**
	Sig. (2-tailed)		<,001	<,001	<,001
	N	172	172	172	172
Introversion	Pearson Correlation	-1,000**	1	-,352**	-,400**
	Sig. (2-tailed)	<,001		<,001	<,001
	N	172	172	172	172
Communication Skill	Pearson Correlation	,352**	-,352**	1	,482**
	Sig. (2-tailed)	<,001	<,001		<,001
	N	172	172	172	172
Leadership Effectiveness	Pearson Correlation	,400**	-,400**	,482**	1
	Sig. (2-tailed)	<,001	<,001	<,001	
	N	172	172	172	172

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

The composite variables were also correlated with the sociodemographic variables of age, education level, years of experience in the field and tenure in the current position. In terms of age, all correlations present a weak positive correlation with the other composite variables except for Introversion, presenting a weak negative correlation. Nonetheless, the impact of age on these constructs is not very significant. Correlation with the remaining variables of education level, years of experience in the field and tenure in current position also showed no significant correlation with the composite variables of extroversion, introversion, communication skills and leadership effectiveness. In more detail, none of these variables presented a meaningful correlation with the sociodemographic variables, except for the variable of years of experience in the field. This variable presented a weak but positive correlation with extroversion (r = 0.117; p = 0.126), communication skill (r = 0.046; p = 0.549) and leadership effectiveness (r = 0.089; p = 0.246), meaning that the more experience an individual has the more extroverted he might become, also developing communication skills and becoming more effective in leadership positions. Basically, there are no significant correlations which suggest that, within this data set, variations in education level, years of experience in the field and tenure in the current position do not significantly impact the measured composite variables of extroversion, introversion, communication skills, or leadership effectiveness (Table 4.3).

Table 4.3 – Correlations between leader's composite variables and sociodemographic variables

		P. Correlation	Spearman Correlation		
		Age	Education Level	Years of Experience in the Field	Tenure in Current Position
Extroversion	Correlation Coefficient	,168*	0,023	0,117	0,054
	Sig. (2-tailed)	0,028	0,768	0,126	0,481
	N	171	172	172	172
Introversion	Correlation Coefficient	-,168*	-0,023	-0,117	-0,054
	Sig. (2-tailed)	0,028	0,768	0,126	0,481
	N	171	172	172	172
Communication Skill	Correlation Coefficient	0,014	-0,023	0,046	-0,018
	Sig. (2-tailed)	0,855	0,768	0,549	0,815
	N	171	172	172	172
Leadership Effectiveness	Correlation Coefficient	0,027	0,032	0,089	0,026
	Sig. (2-tailed)	0,729	0,680	0,246	0,738
	N	171	172	172	172

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

As previously stated, to assess the validity of the leader's self-assessments, their direct team also evaluated their leader's communication skills and leadership effectiveness which are going to be correlated. Both composite variables, when correlated with the variables referring to the employee's perceptions, indicate a moderate positive correlation ($r = 0.328$, $p = 0.017$, regarding communication skill; $r = 0.306$, $p = 0.026$, regarding leadership effectiveness) (Table 4.4). These correlations indicate that the self-evaluations of leaders are backed up by their employees' perceptions, presenting accurate data. However, the correlations are not perfect which might indicate there's a discrepancy in perceptions.

Table 4.4 – Correlations between Leader's and Employees composite variables

		Communication Skill	Leadership Effectiveness
Communication Skills (Employees)	Pearson Correlation	,328*	
	Sig. (2-tailed)	,017	
	N	53	
Leadership Effectiveness (Employees)	Pearson Correlation		,306*
	Sig. (2-tailed)		,026
	N		53

*. Correlation is significant at the 0.05 level (2-tailed).

As such, and as the variables from the employees' point of view are also going to be used in the hypothesis testing, these variables' descriptive statistics were also analysed and correlated to assess the levels of significance among each other.

Table 4.5 demonstrates how employees rated their leaders in general in terms of communication skills and leadership effectiveness. Regarding communication skills, the leaders were rated with a minimum of 2.00 and a maximum of 5.00, resulting in a mean of 4.0094. This suggests that

the leaders presented good communication skills on average, however, there was at least one leader who was rated less favourably. Leadership Effectiveness was rated with a minimum of 2.77 and a maximum of 7.00, presenting an average of 5.7827. As for communication skills, leaders are generally effective, however, there were some leaders with lower ratings.

Table 4.5 – Descriptive Statistics (Employees)

	N	Minimum	Maximum	Mean	Std. Deviation
Communication Skills (Employees)	53	2,00	5,00	4,0094	,76963
Leadership Effectiveness (Employees)	53	2,77	7,00	5,7827	1,05477
N	53		1		

According to Table 4.6, from the point of view of the employees, communication skills (r = 0.129) and leadership effectiveness (r = 0.153) are weakly but positively correlated with extroversion, while presenting a weak but negative correlation to introversion (communication skills: r = – 0.129; leadership effectiveness: r = – 0.153), revealing a relationship that is not statistically significant (p = 0.356; p = 0.273). Comparing these results to the employees' perceptions, the correlations between employees' variables are weaker. However, the correlation between communication skills and leadership effectiveness presents a strong and positive correlation (r = 0.866), being statistically significant (p < 0.001).

Table 4.6 – Correlations between leader's personality types and employee's assessments

		Extroversion	Introversion	Communication Skills (Employees)	Leadership Effectiveness (Employees)
Extroversion	Pearson Correlation	1	-1,000**	,129	,153
	Sig. (2-tailed)		<,001	,356	,273
	N	172	172	53	53
Introversion	Pearson Correlation	-1,000**	1	-,129	-,153
	Sig. (2-tailed)	<,001		,356	,273
	N	172	172	53	53
Communication Skills (Employees)	Pearson Correlation	,129	-,129	1	,866**
	Sig. (2-tailed)	,356	,356		<,001
	N	53	53	53	53
Leadership Effectiveness (Employees)	Pearson Correlation	,153	-,153	,866**	1
	Sig. (2-tailed)	,273	,273	<,001	
	N	53	53	53	53

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

The variables of communication skill and leadership effectiveness assessed by the employees were also correlated with the following sociodemographic variables: employee's education level, employee's years of experience in the field, employee's tenure in current position, employee's tenure working for supervisor, the leader's education level, years of experience in the field and tenure in current

position (Table 4.7). However, none of these variables presented a significant relationship with either communication skills (employee's education level: r = – 0.113, p = 0.689; employee's years of experience in the field: r = 0.266, p = 0.338; employee's tenure in current position: r = 0.137, p = 0.627; employee's tenure working for supervisor: r = – 0.343, p = 0.211; supervisor's education level: r = – 0.091, p = 0.516; supervisor's years of experience in the field: r = 0.105, p = 0.456; supervisor's tenure in current position: r = 0.234, p = 0.092) or leadership effectiveness (employee's education level: r = 0.136, p = 0.628; employee's years of experience in the field: r = 0.289, p = 0.295; employee's tenure in current position: r = 0.007, p = 0.980; employee's tenure working for supervisor: r = – 0.290, p = 0.295; supervisor's education level: r = – 0.052, p = 0.712; supervisor's years of experience in the field: r = 0.082, p = 0.557; supervisor's tenure in current position: r = 0.201, p = 0.148). Still, the relationship between communication skills (employees' perception) and leadership effectiveness (employees' perception) is still a strong positive and significant correlation (r = 0.852; p < 0.001), indicating that higher communication skills are associated with higher leadership effectiveness. Additionally, there exists a strong positive relationship between employee satisfaction and communication skills and leadership effectiveness, respectively.

Table 4.7 – Correlation between employee's composite variables and sociodemographic variables

		1	2	3	4	5	6	7	8	9	10
Communication Skills (Employees)	C. Coefficient	1,000	,852**	-,113	,266	,137	-,343	-,091	,105	,234	,655**
	Sig. (2-tailed)	.	<,001	,689	,338	,627	,211	,516	,456	,092	<,001
	N	53	53	15	15	15	15	53	53	53	53
Leadership Effectiveness (Employees)	C. Coefficient	,852**	1,000	,136	,289	,007	-,290	-,052	,082	,201	,785**
	Sig. (2-tailed)	<,001	.	,628	,295	,980	,295	,712	,557	,148	<,001
	N	53	53	15	15	15	15	53	53	53	53
Education Level (Employees)	C. Coefficient	-,113	,136	1,000	,174	-,122	,170	,737**	-,108	-,306	-,033
	Sig. (2-tailed)	,689	,628	.	,536	,665	,545	,002	,701	,268	,908
	N	15	15	15	15	15	15	15	15	15	15
Years of Experience in the Field (Employees)	C. Coefficient	,266	,289	,174	1,000	,791**	,499	,274	,407	,462	,103
	Sig. (2-tailed)	,338	,295	,536	.	<,001	,058	,323	,132	,083	,714
	N	15	15	15	15	15	15	15	15	15	15
Tenure in Current Position (Employees)	C. Coefficient	,137	,007	-,122	,791**	1,000	,564*	-,085	,512	,593*	-,198
	Sig. (2-tailed)	,627	,980	,665	<,001	.	,029	,762	,051	,020	,478
	N	15	15	15	15	15	15	15	15	15	15
Tenure Working for Supervisor (Employees)	C. Coefficient	-,343	-,290	,170	,499	,564*	1,000	,245	,222	,101	-,450
	Sig. (2-tailed)	,211	,295	,545	,058	,029	.	,378	,425	,719	,093
	N	15	15	15	15	15	15	15	15	15	15
Education Level (Leader)	C. Coefficient	-,091	-,052	,737**	,274	-,085	,245	1,000	-,069	-,122	,062
	Sig. (2-tailed)	,516	,712	,002	,323	,762	,378	.	,365	,110	,661
	N	53	53	15	15	15	15	172	172	172	53
Years of Experience in the Field (Leader)	C. Coefficient	,105	,082	-,108	,407	,512	,222	-,069	1,000	,540**	,141
	Sig. (2-tailed)	,456	,557	,701	,132	,051	,425	,365	.	<,001	,312
	N	53	53	15	15	15	15	172	172	172	53
Tenure in Current Position (Leader)	C. Coefficient	,234	,201	-,306	,462	,593*	,101	-,122	,540**	1,000	,257
	Sig. (2-tailed)	,092	,148	,268	,083	,020	,719	,110	<,001	.	,063

	N	53	53	15	15	15	15	172	172	172	53
Employee Satisfaction	C. Coefficient	,655**	,785**	-,033	,103	-,198	-,450	,062	,141	,257	1,000
	Sig. (2-tailed)	<,001	<,001	,908	,714	,478	,093	,661	,312	,063	.
	N	53	53	15	15	15	15	53	53	53	53

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

In sum, extroversion/ introversion reveals a moderate positive correlation when correlated with the self-assessed constructs of the leaders. However, that is not the case when correlated with the constructs of the employee's evaluation. Yet, in both cases, communication skills present a strong positive correlation with leadership effectiveness. Still, as there was no significant relationship between these composite variables and the sociodemographic variables – either concerning the leaders or employees – so none of them will be accounted as control variables.

4.2 Hypothesis Testing

The hypothesis testing was conducted employing Hayes's PROCESS Macro for SPSS version 29.0, in which Model 4 was chosen to assess the relationship between Extroversion/ Introversion with Leadership Effectiveness when mediated by communication skills. The hypotheses were tested together since Model 4 enables the direct and indirect assessment of Extroversion on Leadership Effectiveness, whether mediated or not by communication. Still, the hypotheses were tested twice: firstly, with the composite variables obtained from the leader's self-assessment; and secondly, with the composite variables obtained from the employee's evaluations.

In the first hypotheses test, the hypothesis "Extroversion is positively related to leadership effectiveness" was tested first by assessing the direct effect of Extroversion on Leadership Effectiveness, as presented in Table 4.8. The value $\beta = 0.1243$ indicates a positive relationship between extroversion and leadership effectiveness and is statistically significant ($p = 0.0002$), which is further supported by the 95% confidence interval (CI) that ranges from 0.0600 to 0.1887, confirming the first hypothesis.

Table 4.8 – First hypothesis testing: Direct effect of X (Extroversion) on Y (Leadership Effectiveness)

Effect	SE	T	P	LLCI	ULCI
,1243	,0326	3,8130	,0002	,0600	,1887

Additionally, the relationship between extroversion and leadership effectiveness when mediated by communication skills is also supported. Looking at Table 4.9, the indirect effect of extroversion on leadership effectiveness when mediated by communication skills is 0.0647, which indicates that part of the positive effect of extroversion on leadership effectiveness is explained by the positive impact extroversion has on communication skills, which in turn, contributes to leadership effectiveness.

Table 4.9 – First hypothesis testing: Indirect effect(s) of X (Extroversion) on Y (Leadership Effectiveness)

	Effect	BootSE	BootLLCI	BootULCI
Communication Skills	,0647	,0180	,0339	,1044

Still, as Table 4.10 illustrates, Extroversion has a positive impact on leadership effectiveness either directly or indirectly via communication skills (t = 5.6971). However, the relationship between these variables can be further explained.

Table 4.10 – First hypothesis testing: Total effect of X (Extroversion) on Y (Leadership Effectiveness)

Effect	Se	T	P	LLCI	ULCI
,1890	,0332	5,6971	,0000	,1235	,2544

Tables 4.10 and 4.11 present communication skills as the outcome variable, analysing its relationship with Extroversion. Table 4.11 presents a Pearson Correlation of 0.3517 indicating a moderate positive correlation among these two variables, although not very strong, suggesting nonetheless that higher levels of extroversion indicate higher communication skills. Furthermore, Table 4.11 supports that the effect of extroversion on communication skills is in fact meaningful. In sum, there is a positive and significant relationship between extroversion and communication skills. Still, even though Extroversion is an important factor, other factors also influence communication skills (R-sq = 0.1237).

Table 4.11 – First hypothesis testing for extroversion: Model Summary of communication skills as the outcome variable

R	R-sq	MSE	F	df1	df2	P
,3517	,1237	,2047	23,9966	1,0000	170,0000	,0000

Table 4.12 – First hypothesis testing for extroversion: Model of communication skills as the outcome variable

	Coefficient	Se	T	p	LLCI	ULCI
Constant	4,7570	,1911	24,8886	,0000	4,3797	5,1343
Extroversion	,2421	,0494	4,8986	,0000	,1445	,3397

In another instance, when Leadership Effectiveness stands as the outcome variable, Table 4.13 supports the evidence that there exists a moderate to strong correlation between Extroversion and Communication Skills and Leadership Effectiveness (R = 0.5415). However, Table 4.14 further explains the relationships between these variables. Table 4.14 suggests that communication skill partially mediates the relationship between Extroversion and Leadership Effectiveness since, when communication skill is contemplated (R = 0.2671), the coefficient of Extroversion is reduced (R = 0.1243).

This indicates that communication skills impact leadership effectiveness more strongly than extroversion.

Table 4.13 – First hypothesis testing for extroversion: Model Summary of leadership effectiveness as the outcome variable

R	R-sq	MSE	F	df1	df2	P
,5415	,2933	,0781	35,0634	2,0000	169,0000	,0000

Table 4.14 – First hypothesis testing for extroversion: Model of leadership effectiveness as the outcome variable

	Coefficient	Se	T	P	LLCI	ULCI
Constant	2,1532	,2544	8,4653	,0000	1,6510	2,6553
Extroversion	,1243	,0326	3,8130	,0002	,0600	,1887
Communication Skills	,2671	,0474	5,6384	,0000	,1736	,3606

In sum, both hypotheses regarding extroversion's impact on leadership effectiveness are verified. However, evidence shows that communication skills have a bigger impact on leadership effectiveness (β = 0.2671) than the personality type of extroversion does (β = 0.1243), as previously mentioned (Table 4.13).

Following the hypothesis testing for extroversion, the hypotheses have to be tested for Introversion. As Table 4.15 suggests, Introversion negatively impacts Leadership Effectiveness (β = – 0.1243), presenting a strong and statistically significant negative direct effect on Leadership Effectiveness (T = – 3.8130). Even when accounting for the indirect effect through communication skills (Table 4.16), Introversion presents a negative effect (β = – 0.0647) implying that high levels of introversion reduce communication skills.

Table 4.15 – First hypothesis testing: Direct effect of X (Introversion) on Y (Leadership Effectiveness)

Effect	Se	T	P	LLCI	ULCI
-,1243	,0326	-3,8130	,0002	-,1887	-,0600

Table 4.16 – First hypothesis testing: Indirect effect(s) of X (Introversion) on Y (Leadership Effectiveness)

	Effect	BootSE	BootLLCI	BootULCI
Communication Skills	-,0647	,0176	-,1028	-,0346

When looking deeper into the relationship between the variables, it is possible to gain more insight. Table 4.17 indicates that even though Introversion is a significant predictor of good communication skills (R = 0.3517), however, communication skills are further explained by other factors (R-sq = 0.1237). Moreover, as demonstrated in Table 4.20, Communication Skills alone are associated with greater Leadership Effectiveness (= 0.2671).

Table 4.17 – First hypothesis testing for introversion: Model summary of communication skill as outcome variable

R	R-sq	MSE	F	df1	df2	P
,3517	,1237	,2047	23,9966	1,0000	170,0000	,0000

Table 4.18 – First hypothesis testing for introversion: Model of communication skill as outcome variable

	Coefficient	Se	T	p	LLCI	ULCI
Constant	6,2096	,1139	54,5211	,0000	5,9848	6,4344
Introversion	-,2421	,0494	-4,8986	,0000	-,3397	-,1445

Table 4.19 – First hypothesis testing for introversion: Model summary of leadership effectiveness as outcome variable

R	R-sq	MSE	F	df1	df2	P
,5415	,2933	,0781	35,0634	2,0000	169,0000	,0000

Table 4.20 – First hypothesis testing for introversion: Model of leadership effectiveness as outcome variable

	Coefficient	Se	T	P	LLCI	ULCI
Constant	2,8991	,3024	9,5868	,0000	2,3021	3,4960
Introversion	-,1243	,0326	-3,8130	,0002	-,1887	-,0600
Communication Skills	,2671	,0474	5,6384	,0000	,1736	,3606

Based on the first hypothesis testing with the leader's composite variables, the results show that personality types do have an influence on Leadership Effectiveness, in which Extroversion is positively correlated with Leadership Effectiveness, while Introversion is not. These correlations are heightened by the mediator communication skills – which are positively correlated with extroversion and negatively correlated with introversion –, however, communication skills alone account for higher leadership effectiveness than the personality types themselves.

The second hypothesis test was completed with the composite variables of the employee's perceptions.

As before, it was assessed the relationship between extroversion and leadership effectiveness by looking at Table 4.21. By looking at this table, it can be seen that this relationship is not statistically significant nor does extroversion have a meaningful direct impact on leadership effectiveness, even though the positive effect might associate higher extroversion with higher leadership effectiveness ($\beta = 0.0581$; $p = 0.5561$). Still, based on this, the hypothesis "Extroversion is positively related to leadership effectiveness" is not supported.

Table 4.21 – Second hypothesis testing: Direct effect of X (Extroversion) on Y (Leadership Effectiveness through employee's perception)

Effect	Se	T	P	LLCI	ULCI
,0581	,0980	,5926	,5561	-,1387	,2548

The second hypothesis "H2: The competence of communication mediates the relationship between introversion/ extroversion and leadership effectiveness" can be tested through Table 4.22. The indirect effect of extroversion on leadership effectiveness through communication skills is positive (β = 0.1536), indicating that communication skills do mediate this relationship. However, the results reveal that this relationship is not robust enough to be considered statistically significant, meaning that the hypothesis is only partially supported.

Table 4.22 – Second hypothesis testing: Indirect effect of X (Extroversion) on Y (Leadership Effectiveness through employee's perception)

	Effect	BootSE	BootLLCI	BootULCI
Communication skills (Employees)	,1536	,1159	-,0702	,3934

At last, Table 4.23, which includes both direct and indirect effects, implies that the overall influence of extroversion on leadership effectiveness, whether direct or through communication skills, is weak and not significant (β = 0.2117; p = 0.2725). However, the positive effect value suggests that higher extroversion might be associated with higher leadership effectiveness.

Table 4.23 – Second hypothesis testing: Total effect of X (Extroversion) on Y (Leadership Effectiveness through employee's perception)

Effect	Se	T	P	LLCI	ULCI
,2117	,1908	1,1092	,2725	-,1714	,5948

Withal, these relationships can be further analysed by looking at the following tables. Table 4.24 presents a correlation coefficient with a weak yet positive linear relationship between extroversion and leadership effectiveness (R = 0.1535), which can indicate that higher extroversion might be associated with higher leadership effectiveness even though this relationship is not very strong since extroversion only explains 2,36% of the variance in leadership effectiveness (R^2 = 0.0236). Still, the values suggest that this model is not statistically significant, meaning that extroversion does not significantly improve leadership effectiveness (MSE = 1.1076; F = 1.2304).

Table 4.24 – Second hypothesis testing for extroversion: Total effect Model Summary of Leadership Effectiveness as outcome variable

R	R-sq	MSE	F	df1	Df2	P
,1535	,0236	1,1076	1,2304	1,0000	51,0000	,2725

Table 4.25 – Second hypothesis testing for extroversion: Total effect Model of Leadership Effectiveness as outcome variable

	Coeff	Se	T	P	LLCI	ULCI
Constant	4,9724	,7447	6,6774	,0000	3,4774	6,4674
Extroversion	,2117	,1908	1,1092	,2725	-,1714	,5948

Some more conclusions can be taken by looking at the tables of leadership effectiveness and communication skills as outcome variables.

Table 4.26 only regards the relationship between extroversion and communication skills. This table shows that the relationship between extroversion and communication skills is weak yet positive (R = 0.1294), in which extroversion has a very limited influence on communication skills (R-sq = 0.0167). Moreover, the p-value of 0.3557 suggests that the relationship between extroversion and communication skills is not significant.

Table 4.26 – Second hypothesis testing for extroversion: Model Summary of Communication Skill as outcome variable

R	R-sq	MSE	F	df1	Df2	P
,1294	,0167	,5938	,8688	1,0000	51,0000	,3557

Gaining more insight by looking at Table 4.27 it is evidenced that the effect of extroversion on communication skills is limited (Coeff = 0.1302), suggesting that extroversion has a minimal and statistically insignificant impact on communication skills (p = 0.3557).

Table 4.27 – Second hypothesis testing for extroversion: Model of Communication Skill as outcome variable

	Coeff	Se	T	P	LLCI	ULCI
Constant	3,5109	,5452	6,4391	,0000	2,4163	4,6055
Extroversion	,1302	,1397	,9321	,3557	-,1503	,4108

Looking at Table 4.28, it is indicated that there exists a very strong and positive relationship between leadership effectiveness and the predictors (R = 0.8671), in which 75.19% of the variance in leadership effectiveness is explained by them (R-sq = 0.7519). Furtherly, the p-value of 0.0000 indicates that the model is statistically significant.

Table 4.28 – Second hypothesis testing for extroversion: Model Summary of Leadership Effectiveness as outcome variable

R	R-sq	MSE	F	df1	Df2	P
,8671	,7519	,2870	75,7766	2,0000	50,0000	,0000

Besides, Table 4.29 further explains these relationships, revealing that, in fact, it is communication skills that have a meaningful impact on leadership effectiveness. While extroversion has a positive coefficient (Coeff = 0.0581), it is not statistically significant, not presenting a strong impact on leadership effectiveness. Meanwhile, the effect of communication skills on leadership effectiveness is highly significant (Coeff = 1.1796; p = 0.0000), standing as a critical factor in predicting leadership effectiveness.

Table 4.29 – Second hypothesis testing for extroversion: Model of Leadership Effectiveness as outcome variable

	Coeff	Se	T	P	LLCI	ULCI
Constant	,8311	,5104	1,6283	,1097	-,1941	1,8563
Extroversion	,0581	,0980	,5926	,5561	-,1387	,2548
Communication Skill	1,1796	,0974	12,1163	,0000	,9840	1,3751

In sum, after analysing these tables, it is evident that, even though extroversion has a positive effect on leadership effectiveness whether mediated by communication skills or not, the relationship is not very impactful. However, when controlling only for communication skills and leadership effectiveness, a meaningful and impactful correlation is evidenced. With this, when regarding for extroversion, the hypothesis H1.a is not supported, while H2.a is supported. Still, as previously done, the hypothesis still has to be tested for Introversion.

Table 4.30 enables the testing of the first hypothesis by demonstrating the direct effect of introversion on leadership effectiveness. In this case, introversion has a small, negative, but statistically insignificant direct effect on leadership effectiveness (β = – 0.0581), meaning that higher introversion might be associated with slightly lower leadership effectiveness even though the effect is small (p = 0.5561).

Table 4.30 – Second hypothesis testing: Direct effect of X (Introversion) on Y (Leadership Effectiveness of employee's perception)

Effect	Se	T	P	LLCI	ULCI
-,0581	,0980	-,5926	,5561	-,2548	,1387

Subsequently, when including the mediation effect of communication skills on the relationship between introversion and leadership effectiveness, it can be seen that the correlation is also negative but not statistically significant (β = – 0.1536). Additionally, the confidence interval of [– 0.3884, 0.0782] suggests that communication skills may not significantly mediate the relationship between introversion and leadership effectiveness (Table 4.31).

Table 4.31 – Second hypothesis testing: Indirect effect(s) of X (Introversion) on Y (Leadership Effectiveness of employee's perception)

	Effect	BootSE	BootLLCI	BootULCI
Communication Skills	-,1536	,1182	-,3884	,0782

Looking at the final table (Table 4.32), to evaluate the direct and indirect impact of introversion on leadership effectiveness together, it can be seen that the same conclusions are perpetuated – the overall impact is negative and statistically insignificant (β = – 0.2117; p = 0.2725).

Table 4.32 – Second hypothesis testing: Total effect of X (Introversion) on Y (Leadership Effectiveness of employee's perception)

Effect	se	T	P	LLCI	ULCI
-,2117	,1908	-1,1092	,2725	-,5948	,1714

Besides the Total Effect Table (Table 4.32), the relationships can be further explored by analysing other tables. Looking first at the relationship between introversion and leadership effectiveness (Table 4.33), it can be concluded that this is a weak and negative relationship (R = 0.1535), in which introversion only explains 2.36% of the variance in leadership effectiveness (R-sq = 0.0236). Still, a p-value of 0.2725 suggests that introversion does not significantly predict leadership effectiveness in this sample.

Table 4.33 – Second hypothesis testing for Introversion: Total effect Model Summary of Leadership Effectiveness as outcome variable

R	R-sq	MSE	F	df1	df2	P
,1535	,0236	1,1076	1,2304	1,0000	51,0000	,2725

Table 4.34 – Second hypothesis testing for Introversion: Total effect Model of Leadership Effectiveness as outcome variable

	Coeff	Se	T	P	LLCI	ULCI
Constant	6,2425	,4390	14,2193	,0000	5,3611	7,1239
Introversion	-,2117	,1908	-1,1092	,2725	-,5948	,1714

Then, it can be assessed the relationship between each construct and communication skills. In this case, the relationship between introversion and communication skills is negative and weak (R = 0.1294), in which introversion only explains 1.67% of the variance in the communication skills (R-sq = 0.0167). In addition, the p-value of 0.3557 suggests that introversion is not a significant predictor of communication skills in this sample, also stating its statical insignificance (Table 4.35).

Table 4.35 – Second hypothesis testing for Introversion: Model Summary of communication skills as outcome variable

R	R-sq	MSE	F	df1	df2	P
,1294	,0167	,5938	,8688	1,0000	51,0000	,3557

Moreover, the negative coefficient of introversion present in Table 4.36 implies that higher levels of introversion are associated with lower communication skills, even though the effect size is small (Coeff = – 0.1302). Still, the model is once again proven to not be statically significant (p = 0.3557), suggesting that introversion does not have a meaningful impact on communication skills in this sample.

Table 4.36 – Second hypothesis testing for Introversion: Model of communication skills as outcome variable

	Coefficient	se	T	P	LLCI	ULCI
Constant	4,2923	,3214	13,3531	,0000	3,6470	4,9377
Introversion	-,1302	,1397	-,9321	,3557	-,4108	,1503

At last, the relationship between leadership effectiveness and the predictors can be further analysed. At first, it can be seen that there exists a strong correlation between the predictors and leadership effectiveness (R = 0.8671), and the R-squared of 0.7519 corroborates that 75.19% of the variance in leadership effectiveness is explained by the predictors. Furthermore, the p-value of 0.0000 indicates that the model is highly significant meaning that introversion and communication skills together significantly predict leadership effectiveness (Table 4.37).

Table 4.37 – Second hypothesis testing for Introversion: Model Summary of leadership effectiveness as outcome variable

R	R-sq	MSE	F	df1	df2	P
,8671	,7519	,2870	75,7766	2,0000	50,0000	,0000

Looking into the table below, the relationship between each single construct can be deeper analysed. As can be seen in Table 4.38 – and as was already discussed – introversion reveals a small and negative relationship with leadership effectiveness (Coeff = – 0.0581), while communication skill presents a strong and positive correlation (Coeff = 1.1796), which evidences that communication skill has a substantial impact on leadership effectiveness. In sum, the overall model is statistically significant, largely due to the impact of communication skills on leadership effectiveness.

Table 4.38 – Second hypothesis testing for Introversion: Model of leadership effectiveness as outcome variable

	Coefficient	Se	T	p	LLCI	ULCI
Constant	1,1794	,4739	2,4889	,0162	,2276	2,1313
Introversion	-,0581	,0980	-,5926	,5561	-,2548	,1387
Communication Skill	1,1796	,0974	12,1163	,0000	,9840	1,3751

In sum, based on this analysis when testing for introversion with the composite variables based on the employee's assessment, it can be concluded that none of the hypotheses are supported.

Having the hypotheses tests completed based on the composite variables of both perspectives – leaders and employees – it can be concluded that the results are manifestly different. When testing with the composite variables of the leaders, the hypothesis results were: h1.a and h2.a were supported, while h1.b and h2.b were not supported. These results imply that extroversion, especially when mediated by communication skills, has a positive and meaningful impact on leadership effectiveness while introversion has the opposite effect. On the other hand, after testing with the composite variables based on the employees' evaluations, the hypotheses results were: h1.a, h1.b and h2.b were not supported, while h2.a was partially supported. These results denote that the personality types of extroversion or introversion do not impact leadership effectiveness, except when mediated by communication skills. When mediated by communication skills, extroversion does have an impact on leadership effectiveness, but introversion does not. However, it was communication skills alone that presented the most meaningful correlations with leadership effectiveness, whether accounting for personality types or not. In this sense, these results do impose several conclusions that will be further discussed in the discussion chapter.

5. Discussion

This study investigates how the personality types of extroversion and introversion influence leadership effectiveness, focusing on the mediating role of communication skills. As there were two data sets – one consisting of self-evaluations by leaders regarding their communication skills and leadership effectiveness, and the other comprising assessments of these constructs from the perspective of employees under the leaders' supervision – two hypotheses testing were conducted separately for these datasets to provide a nuanced understanding of the relationships between personality traits, communication skills, and leadership effectiveness.

The analysis revealed a notorious discrepancy between the two hypotheses testing. In the leader's self-evaluations, hypotheses H1 and H2 were supported for extroversion and not supported for introversion. In the employee's evaluations, hypothesis h1 was rejected for both extroversion and introversion, however, hypothesis H2 was partially supported when accounting for extroversion, but not supported for introversion. In sum, the results of the first hypothesis testing state that extroversion is positively related to leadership effectiveness, especially when mediated by communication skills, while introversion presents the opposite results. The results of the second hypothesis testing demonstrate that neither extroversion nor introversion have an impact on leadership effectiveness, except for extroversion when mediated by communication skills, which partially supports the relationship. As such, these findings will be discussed in the following subchapters, with a focus on the discrepancies and their implications for the theory.

5.1 Theoretical Implications

As stated, the first hypothesis testing – based on the leader's self-evaluations – supported both hypotheses for extroversion, while rejecting them for introversion. By limiting the analysis solely to these results, it is suggested that extroverts tend to be more effective leaders compared to introverts. Furthermore, the results imply that extroversion enhances leadership effectiveness partly through improved communication skills, which aligns with research from Barrick and Mount (1991) and Judge et al., 2002 (cited by Grant et al., 2011). In sum, as these results present and these authors defend, extroverts' innate tendencies towards sociability may help them connect with and lead their teams more effectively. Conversely, introverts present a lower communication proficiency, due to their more reserved nature, which can translate into lower perceived leadership effectiveness, further grounding the assumptions that introverts cannot succeed in leadership positions (McCord & Joseph, 2020).

However, these first hypotheses test demonstrate that communication skills have a more considerable impact on leadership effectiveness than extroversion or introversion alone. In fact, the

influence of extroversion on leadership effectiveness is enhanced through communication skills, while introversion's negative impact is aggravated by lower communication abilities.

The second hypothesis testing – based on the employee's evaluations – did not support hypotheses h1.a, h1.b and h2.b, but did partially support hypothesis h2.a. Contrary to the results of the first test, these findings suggest that there is no relationship between personality and leadership effectiveness – regardless of the personality type. This contradicts the first hypothesis testing and challenges the commonly held belief that extroverts are inherently more effective leaders, aligning with the perspectives of Judge and Zapata (2015) (cited by Karlsen & Langvik, 2021) and Mitchell et al. (2022), who stated that there was limited empirical evidence that supports the relationship between extroversion and leadership effectiveness.

Once again, focusing solely on these results, some conclusions can be made. From the employee's perspective, extroversion did not significantly impact leadership effectiveness. Still, h2.a was partially mediated even though the effect was not significant. This suggests that even if extroverted leaders possess superior communication skills, their personality type alone does not make them significantly more effective as leaders. Similarly, introversion does not significantly impact leadership effectiveness either. With this, while some authors have considerably linked extroversion to leadership, Blevins et al. (2021), Cain (2012), and Mitchell et al. (2022) have expressed their scepticism towards this association, noting that few studies confirmed this relationship. As such, this second test aligns with those views, confirming that neither extroversion nor introversion predicts leadership effectiveness. Moreover, communication skills do not significantly mediate the relationship between introversion and leadership effectiveness from the employee's perspective.

By looking at both hypotheses testing separately, the obvious conclusions can be made. However, when comparing the differences and looking deeper into the underlying meaning of these results, some other deductions emerge.

The discrepancy between the leader's self-assessment and employee evaluations suggests that leaders' self-perceptions of their effectiveness might differ significantly from how employees perceive them. This is, the discrepant results might stem from the biased responses given by leaders – in which extroverted leaders overestimate their effectiveness and introverted leaders underestimate theirs due to self-enhancement strategies, which allow individuals to enhance their self-image (Vaughan-Johnston et al., 2021) –, while employee evaluations might not view these traits as impactful in assessing effectiveness, focusing more on actual performance and outcomes rather than perceived personality traits.

In sum, the first test results might have been biased due to self-evaluation tendencies, which often result in people rating themselves more favourably, reflecting an overoptimism and overconfidence in their leadership effectiveness (Kruger, 1999, cited by Deffuant et al., 2024; Klar &

Giladi, 1997, cited by Deffuant et al., 2024). Extroverts do tend to possess – or appear to possess – a confidence and this self-confidence, based on self-enhancement strategies, shapes their self-judgment about their capabilities and competencies (Shrauger & Schohn, 1995, cited by McCormick, 2001; Vaughan-Johnston et al., 2021) which magnifies their idea of self-efficacy, which refers to one's belief in their ability to be effective in their domain (McCormick, 2001). Introverts, on the other hand, may experience a negative bias due to the negative connotations associated with their personality type (McCord & Joseph, 2020; Blevins, 2021). As such, introverts might feel ashamed when answering questionnaires or might answer questionnaires in the light of what is associated with their personality type, being influenced by a negative bias. Complementarily, as Blevins (2021) defends, the negative connotation towards introversion is perpetuated in personality types themselves, including the Big 5. In sum, introversion is reduced to the flaws of extroversion. So, when introverts answer these types of tests, the results are biased and the opposite of extroversion.

Despite the diverging results of both hypotheses testing, there was one common result in both tests: communication skills stood as the strongest predictor of leadership effectiveness, replicating Mitchell's (2022) research results. As such, this means that leaders who excel in communication are much more likely to be effective, regardless of whether they are extroverted or introverted.

In a more in-depth approach, these results also present theoretical implications, mainly due to the different hypotheses testing results.

The first hypothesis testing validates the trait theory of leadership (Northouse, 2016; Hambrick, 2007, cited by Colbert et al., 2014), which aligns with the extensive body of literature that claims extroversion is the best predictor of leadership effectiveness (Judge et al., 2002, cited by Grant et al. 2011). Conversely, it further subdues introversion to its negative correlation with leadership effectiveness (McCord & Joseph, 2020). However, when looking at the results of the second hypothesis testing, the same theory that places a big importance on traits to predict leadership is rejected since extroversion and introversion were not linked to leadership effectiveness. Moreover, in accordance with the ideas of Blevins (2021) and Mitchell (2022), these results imply that the extroversion association with leadership may be overstated in the literature, asking for a re-evaluation of the assumption that extroverts are inherently better leaders. Regarding introversion, it is proven that this personality type does not hinder leadership effectiveness, challenging the negative bias linked to introversion, following the ideas proposed by Cain (2012) and Laney (2002).

Thus, both hypothesis tests presented similar results concerning communication skills. While in the first test, communication skills appear to bridge the relationship between personality and leadership effectiveness, the second test ascertains that communication skills should be considered as core constructs in leadership models. In sum, both tests emphasise the importance of communication skills in leadership effectiveness, which is in alignment with studies of Hackman and Johnsson (2013) that

defend that leadership is a communication-based activity. As such, it is implied that leadership effectiveness is not solely determined by innate personality traits but also by learned skills such as communication – that not only mediates the relationship but also has a direct impact on leadership effectiveness itself. Therefore, it is highlighted that theoretical focus should shift from personality traits to other variables – or incorporate other factors besides personality traits –, such as skills to provide a more comprehensive understanding of the leadership phenomenon, since communication was identified as the best predictor of leadership effectiveness (Stogdill, 1974, cited by Verkerk, 1990). With the focus on communication skills, it is also possible to derive that leadership effectiveness is more reliant on behaviour and skill-based theories that can be developed and enhanced regardless of personality type, which aligns with the theories of the Model of Hogan and Warrenfeltz (2003) (cited by Hogan & Kaizer, 2005), Three Skills Approach (Katz, 1955, cited by Northouse, 2016) and the Mumford Model (Mumford, 2000, cited by Northouse, 2016).

In conclusion, these results emphasise that personality is not decisive for leadership effectiveness, at least from the employees' perspective. In fact, based on the effect of communication skills presented on leadership effectiveness, these results suggest that leadership models should combine personality theories with skills approaches since it is the development of skills that drives leadership performance and leads to leadership success, which aligns with Mitchell's (2022) findings. Still, leader's self-evaluations revealed a negative relationship between introversion and leadership effectiveness. In light of all the factors already discussed, it is imperative to adopt new methods to assess introversion: firstly to gain better insight into its effect on leadership since there's still a gap in the literature regarding that (Grant et al., 2011); and secondly due to the negative bias associated with the personality type (Blevins et al., 2021) that, as it was previously mentioned, should be demystified since leadership effectiveness is also dependent on the leader's self-efficacy (McCormick, 2001) and so, for introverted leaders to be successful, they must have a good self-concept regarding their self-efficacy.

5.2 Practical Implications

Concluding the analysis of the hypothesis testing, some practical implications can be drawn from the discussed findings.

As evidenced by the results of the hypotheses testing and the conclusions taken from it, it can be said that organisations should first and foremost capitalise on the investment of communication skills. In line with Mitchell's et al. (2022) conclusions, communication skills proved to be the most significant predictor of leadership effectiveness, even when accounting for the personality types of extroversion and introversion. So, first and foremost, organisations should foster a culture of open communication, creating an environment where clear and transparent communication is encouraged at all levels, improving feedback mechanisms and consequently resulting in greater leadership effectiveness.

Additionally, as skills can be learned and developed (Mitchell et al., 2022), organisations should invest in leadership development programs that contemplate the training in communication skills. Still, as extroverts and introverts approach leadership and communication differently, this training could be tailored to the different personality types, addressing the areas of improvement and maximising their unique strengths.

Furthermore, organisations should reconsider the recruitment and selection processes since elimination criteria are sometimes based on personality tests (McCord & Joseph, 2020). Instead – or in addition to – of using personality tests, organisations should use communication skills as a central criterion for leadership roles. Still, recruiters should opt for unbiased personality assessments (Blevins et al., 2021) that consider both the strengths and weaknesses of extroverts and introverts thus adopting a selection and recruitment process that thrives on diversity and inclusivity. In addition, a more complex personality test might provide new insights into introversion – that is severely understudied – while also promoting introvert's self-confidence and, by extension, their self-efficacy, which is essential to be an effective leader (McCormick, 2001).

5.3 Limitations

As this research nears completion, some limitations that emerged during its development can be identified in retrospect.

Firstly, as previously mentioned, there exists a literature gap towards introversion that posed some challenges in the development of the literature review. Secondly, during the data collection phase, several difficulties arose. Since there were two questionnaires to be answered – one for leaders and one for employees, which leaders needed to forward with an identification key – the data collection encountered some complications: some leaders did not complete the questionnaires, while others did not forward the second questionnaire to their teams, resulting in a big discrepancy between the answers from leaders and the answers from employees. Concerning the questionnaires themselves, the methodology for linking leaders and employees resulted in mismatches, eliminating 8 responses and reducing the sample size of the employees, resulting in the loss of some information. Thus, only 99 valid employees' responses were available, raising the risk of not having enough representativeness. Moreover, the questionnaires were available in three different languages and shared in four different countries. This might impose a limitation in the sense that contextual factors were not accounted for. People from different cultures, and therefore different organisational cultures, might have interpreted each question based on their own perceptions (Hofstede et al., 2010), potentially affecting response consistency across participants from different backgrounds.

Thirdly, in regard to the questionnaires themselves, some responses might have been biased. In the leader's questionnaire, there were three self-assessments: one to assess the leader's personality

type and the other two to evaluate their communication skills and leadership effectiveness. As stated in the theoretical implications, these self-assessments might have been object to biased responses, since people tend to rate themselves in a more favourable way (Deffuant et al., 2024). Additionally, as already stated but only noticed afterwards, the Big 5 test used for the personality assessment, is skewed towards extroversion, inherently portraying introversion negatively (Blevins et al., 2021). This representation of introversion inherently provides negative results of the personality type, even making introverts self-aware of identifying as such. Additionally, Common Method Variance (CMV) might have influenced the findings, as both independent and dependent variables were measured using self-assessment in the leader's questionnaires. Even though the employees' perspective was accounted for, the first hypothesis testing was based on the leader's self-evaluation, so it might have occurred that some of the relationships between the variables may have been inflated, potentially biasing the results. Moreover, as this was a correlational study, it is impossible to infer causality between the variables, meaning that no direct cause-effect relationships can be established between personality traits, communication skills and leadership effectiveness.

At last, and in tandem with the last described limitation, after conducting the data analysis it was noticed that the sample was mostly composed of extroverts. As such, the composite variable of extroversion was reversed to an introversion composite variable to enable the data analysis. However, this might have generated skewed results (DeVellis, 2017).

5.4 Suggestions for future research

Given the discussed results and limitations, it can be inferred that the gap in the literature towards introversion is still very prominent (Schueller, 2012, cited by Blevins et al., 2021). So, some research should be conducted on this topic to raise empirical awareness and challenge common biased perceptions. Also, this would help ensure a fair and balanced understanding of both introversion and extroversion, aiding the decision-making process in the diverse organisational processes while minimising the prejudice introverts are victims of.

As such, the first suggestion for future research would be to develop a new personality assessment that accounts for the characteristics, strengths and weaknesses of introverts and extroverts without biasing one over the other, as suggested by Blevins et al. (2021). This would benefit to then assess if there are any differences in the concept of self-efficacy of both extroverts and introverts (McCormick, 2001). Additionally, it would be beneficial to replicate this study using a different personality test, while also incorporating other interpersonal skills, such as emotional intelligence, to provide a more comprehensive view of leadership effectiveness. Still, some other research could be conducted. Moreover, touching upon the Common Method Variance and the correlational studies

limitations, conducting longitudinal studies would allow for a deeper understanding of the causal relationships between the variables.

As defended by Bergman et al. (2014) and Bergner et al. (2010), it is some facets of the type of extroversion that better predict leadership effectiveness than the actual trait itself (Karlsen & Langvik, 2021). So, research should be conducted to first gain insight into the facets of introversion that best predict leadership effectiveness. Additionally, inspired by Northouse (2016), it could be investigated the preferred communication and leadership styles of each personality type, to assess which style is more innate to each one of them and which results better in leadership effectiveness.

Also, Mitchell et al. (2022) and Blevins et al. (2021) highlight that extroverts are preferred in leadership roles but may struggle in detail-oriented positions. To gain more insight into whether each personality type excels more naturally in a given industry or specific job roles, a study to compare the effectiveness of both introverted and extroverted leaders in different fields should be conducted. Moreover, as McCord and Joseph (2020) stated, introverts might be victims of injustices when being selected or promoted for determined job roles. Hence, a study comparing the career progression of introverts and extroverts should be conducted to assess if there's a bias in terms of personality type.

At last, Fiedler's Contingency Model (Verkerk, 1990) and Grant et al. (2011) inspire the idea that different leadership styles may work better in determined situations. As such, research could explore how different situations benefit more from the strengths of extroverted leaders or the strengths of introverted leaders.

Conclusion

The interest in this topic arose not only from the existing gap in the literature but as from the embedded misconceptions towards introversion. This way, this study sought to investigate how the personality types of extroversion and introversion influenced leadership effectiveness, through the mediation of communication skills, by answering the research question "How does the personality types of extroversion and introversion influence leadership effectiveness in the workplace according to the level of the communication skills of a leader?" With this, the goal was to empirically conceptualise introversion to avoid further misconceptions, demonstrating that individuals with this personality type could develop strong communication skills and therefore become effective leaders while counteracting the skewed view of organisations towards introversion and helping them see the strengths of leaders with this personality type.

Two perspectives on communication skills and leadership effectiveness were analysed to provide a more in-depth insight into the subject – one based on the leader's self-assessment and the other based on assessments from their teams. The first dataset corroborated the positive correlation between extroversion and leadership effectiveness, even when mediated by communication skills. However, did not support its relationship when accounting for introversion. The second dataset did not support any correlation between these personality types and leadership effectiveness, except when extroversion was mediated by communication skills. At first, it was proposed that both personality types could be positively related to leadership effectiveness. However, the first dataset enabled the deduction that it was the self-perception of each leader that resulted in a positive result (Vaughan-Johnston et al., 2021), which is important for their self-efficacy (McCormick, 2001), nonetheless. But, based on the employees' perceptions, the leader's personality type does not influence their communication skills or their leadership effectiveness. Paradoxically, both hypotheses testing pointed towards the importance of communication skills. So, regardless of personality type, leaders and organisations should invest in the training of communication skills (Mitchell et al., 2022) and even other interpersonal skills.

As initially stated, personality type is a foundational element that accompanies individuals throughout life and will undoubtedly influence each leader's way of thinking and behaving. However, it is worth noting that attributing failures to an individual based on their personality type – that is partly heritable and therefore unchangeable (Cain, 2012) – is the same as believing that individuals do not have space to learn and grow. And, based on these results, it is possible to believe that introverts – such as extroverts – are indeed capable and, as already discussed, might have unique strengths worth exploring.

In conclusion, this research hopefully allowed to shed some light on all the unexplored potential of what is introversion, also helping gain a better understanding of this personality type.

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Appendix

Appendix I – Questionnaire 1: Supervisors: Introversion and Extroversion in the Workplace

This questionnaire was developed as part of my Master's Thesis to obtain a Master's degree in Human Resources Management and Organisational Consultancy at ISCTE.

This thesis focuses on the differences between Introversion and Extroversion in the workplace, seeking to determine whether effectiveness in communication and leadership is influenced by Introversion and Extroversion personality types. To do this, it was necessary to develop a questionnaire, which is divided in two parts: one for hierarchical superiors, contemplating a personality test and an assessment of communication and leadership skills; and another for their subordinates, who will have to assess their superiors based on their satisfaction with their communication and leadership. To do this, leaders will have to forward the Employees: Introversion and Extroversion in the Workplace questionnaire (https://forms.office.com/e/U5aVdnFiZZ).

All the answers provided in this questionnaire are confidential and will only be used for research purposes and cannot be shared with third parties. It should take no more than 15 minutes to answer the questionnaire. However, if you have any questions, I can be contacted at the following email address: mafsa2@iscte-iul.pt.

Thank you for taking part in this questionnaire!

Informed Consent

1. By marking below, you indicate that you have read and understood the information provided and agree to participate voluntarily in this study.

◯ I agree to participate in the study

Identification Key

As mentioned earlier, the responses to this questionnaire are confidential. However, since it is divided into two parts, it is necessary to create an identification key that you will need to provide to your collaborators in order to later be able to cross-reference the data.

2. Please enter your response as requested:

a) Second letter of your first name.

b) Third letter of your last name.

c) Last two digits of your birth year (e.g., 77).

d) First letter of your mother's first name.

In the end, you should obtain a key identical to "AR99R" which should be shared with your team.

Insert your answer in here

Big 5 Personality Test

The following statements present characteristics that may or may not apply to you. Please answer each statement according to the extent to which you agree or disagree with each statement, taking into consideration that: 1 – Strongly Disagree; 2 – Disagree a Little; 3 – Neither Agree nor Disagree; 4 – Agree a Little; 5 – Strongly Agree.

I see myself as someone who…	1	2	3	4	5
3. Is talkative.					
4. Tends to find fault with others.					
5. Does a thorough job.					
6. Is depressed, blue.					
7. Is original, comes up with new ideas.					
8. Is reserved.					
9. Is helpful and unselfish with others.					
10. Can be somewhat careless.					
11. Is relaxed, handles stress well.					
12. Is curious about many different things.					
13. Is full of energy.					
14. Starts quarrels with others.					
15. Is a reliable worker.					
16. Can be tense.					
17. Is ingenious, a deep thinker.					
18. Generates a lot of enthusiasm.					
19. Has a forgiving nature.					
20. Tends to be disorganized.					
21. Worries a lot.					
22. Has an active imagination.					
23. Tends to be quiet.					
24. Is generally trusting.					
25. Tends to be lazy.					
26. Is emotionally stable, not easily upset.					
27. Is inventive.					

28. Has an assertive personality.					
29. Can be cold and aloof.					
30. Perseveres until the task is finished.					
31. Can be moody.					
32. Values artistic, aesthetic experiences.					
33. Is someone shy, inhibited.					
34. Is considerate and kind to almost everyone.					
35. Does things efficiently.					
36. Remains calm in tense situations.					
37. Prefers work that is routine.					
38. Is outgoing, sociable.					
39. Is sometimes rude to others.					
40. Makes plans and follows through with them.					
41. Gets nervous easily.					
42. Likes to reflect, play with ideas.					
43. Has few artistic interests.					
44. Likes to cooperate with others.					
45. Is easily distracted.					
46. Is sophisticated in art, music, or literature.					

Communication Skills Test

These questions are designed to assess communication skills. Please answer taking into account your usual behaviour, according to the following scale: 1 – Strongly Disagree; 2 – Mildly Disagree; 3 – Somewhat Disagree; 4 – Undecided; 5 – Somewhat Agree; 6 – Mildly Agree; 7 – Strongly Agree.

	1	2	3	4	5	6	7
47. I have a good command of the language.							
48. I am sensitive to other's needs of the moment.							
49. I typically get right to the point.							
50. I pay attention to what other people say to me.							
51. I deal with others effectively.							
52. I am a good listener.							
53. I express my ideas clearly.							

54. I am difficult to understand when I speak.							
55. I generally say the right thing at the right time.							
56. I am easy to talk to.							

Leadership Effectiveness Test

Please answer the following questions on the basis of the attributes, competences and qualities you believe you currently possess and not on the basis of what you think you should possess. Do so, according to the following scale: 0 – Never; 1 – Seldom; 2 – Sometimes; 3 – Usually; 4 – Always.

	0	1	2	3	4
57. I influence others.					
58. I have self-discipline.					
59. I have a good track record.					
60. I have strong people skills.					
61. I have the ability to solve problems.					
62. I do not accept the status quo.					
63. I see the big picture.					
64. I have the ability to handle stress.					
65. I display a positive spirit.					
66. I understand people.					
67. I am free of personal problems.					
68. I am willing to take responsibility.					
69. I am free from anger.					
70. I am willing to make changes.					
71. I have integrity.					
72. I have strong values.					
73. I am able to see what has to be done next.					
74. I am accepted as a leader by others.					
75. I have the ability and the desire to keep learning.					
76. I have a manner that draws people.					
77. I have a good self-image.					
78. I have a willingness to serve others.					
79. I have the ability to bounce back when problems arise.					
80. I have the ability to develop other leaders.					

81. I take initiative.					

Personal and Professional Characterisation

In this last section, answer a few questions about yourself.

82. Gender: ◯ Male ◯ Female ◯ Other ◯ Prefer not to say

83. Age: _____ 84. Current Position: _____

85. Education Level:

◯ Secondary Education ◯ Post-compulsory Education ◯ Bachelor's Degree

◯ Master's Degree ◯ PhD ◯ Other: _____

86. Years of experience in the field:

◯ Less than a year

◯ 1 to 2 years

◯ 3 to 5 years

◯ 6 to 9 years

◯ 10 to 14 years

◯ 15 to 19 years

◯ 20 to 24 years

◯ 25+ years

87. Tenure in current position:

◯ Less than a year

◯ 1 to 2 years

◯ 3 to 5 years

◯ 6 to 9 years

◯ 10 to 14 years

◯ 15 to 19 years

◯ 20 to 24 years

◯ 25+ years

Thank you very much for your time!

Please, do not forget to send the following questionnaire to your team with the Identification key:

a) Second letter of your first name.

b) Third letter of your last name.

c) Last two digits of your birth year (e.g., 77).

d) First letter of your mother's first name.

Employees Questionnaire: https://forms.office.com/e/cMcpfMQdE0

Appendix II – Questionnaire 2: Employees: Introversion and Extroversion in the Workplace

This questionnaire was developed as part of my Master's Thesis to obtain a Master's degree in Human Resources Management and Organisational Consultancy at ISCTE.

This thesis focuses on the differences between Introversion and Extroversion in the workplace, seeking to determine whether effectiveness in communication and leadership is influenced by Introversion and Extroversion personality types. To do this, it was necessary to develop a questionnaire, which is divided in two parts: one for hierarchical superiors, contemplating a personality test and an assessment of communication and leadership skills; and another for their subordinates, who will have to assess their superiors based on their satisfaction with their communication and leadership. To do this, leaders will have to forward the Employees: Introversion and Extroversion in the Workplace questionnaire.

All the answers provided in this questionnaire are confidential and will only be used for research purposes and cannot be shared with third parties. It should take no more than 15 minutes to answer the questionnaire. However, if you have any questions, I can be contacted at the following email address: mafsa2@iscte-iul.pt.

Thank you for taking part in this questionnaire!

Informed Consent

1. By marking below, you indicate that you have read and understood the information provided and agree to participate voluntarily in this study.

◯ I agree to participate in the study

Identification Key

2. Please, insert the key provided by your boss:

Insert your answer in here

Communication Satisfaction Questionnaire

Answer according to your opinion on how is the communication between you and your supervisor, based on the following scale: 1 – Strongly Disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 – Strongly agree.

	1	2	3	4	5
3. My superior provides sufficient amounts of useful information that I understand.					
4. My superior share and respond to information in a timely manner.					
5. My superior actively listen to my viewpoints.					
6. My superior always speaks politely and this motivates me to model him/ her.					
7. I know what I am expected to achieve when I am given a task at work.					

8. My superior maintains essential information flows to me.					

Leadership Effectiveness

Please respond with your opinion of your boss's leadership, according to the following scale: 1 – Never; 2 – Rarely; 3 – A few times; 4 – Often; 5 – Several times; 6 – Very often; 7 – Always.

	0	1	2	3	4	5	6
9. Your boss has an attitude that makes you respect him/ her.							
10. You are proud to be associated with your boss.							
11. Your boss is concerned with teaching.							
12. Your boss instils confidence.							
13. Your boss makes team members do more than is expected.							
14. In an environment of change and new challenges, your boss is able to transmit "good energy".							
15. Your boss promotes a harmonious environment.							
16. Your boss helps you develop your strengths.							
17. You consider your team to be cohesive.							
18. Your boss promotes the sharing of information.							

Employee Satisfaction

Please respond based on your satisfaction with your own work, according to the following scale: 1 – Never; 2 – Rarely; 3 – A few times; 4 – Often; 5 – Several times; 6 – Very often; 7 – Always.

	0	1	2	3	4	5	6
19. You feel motivated in your workplace.							
20. You identify with the work team.							
21. You do more than your boss asks of you.							
22. You are committed to ensuring that the organisation's needs are met.							
23. You feel recognised for your work.							
24. You identify with your boss's leadership style.							
25. You trust the decisions made by your boss.							
26. You are creative in your workplace.							
27. You have an optimistic view of the company.							
28. You want to achieve success in the company.							

Personal and Professional Characterisation

In this last section, answer a few questions about yourself.

29. Gender: ◯ Male ◯ Female ◯ Other ◯ Prefer not to say

30. Age: _____ 31. Current Position: _____

32. Education Level:

◯ Secondary Education ◯ Post-compulsory Education ◯ Bachelor's Degree

◯ Master's Degree ◯ PhD ◯ Other: _____

33. Years of experience in the field:

◯ Less than a year

◯ 1 to 2 years

◯ 3 to 5 years

◯ 6 to 9 years

◯ 10 to 14 years

◯ 15 to 19 years

◯ 20 to 24 years

◯ 25+ years

34. Tenure in current position:

◯ Less than a year

◯ 1 to 2 years

◯ 3 to 5 years

◯ 6 to 9 years

◯ 10 to 14 years

◯ 15 to 19 years

◯ 20 to 24 years

◯ 25+ years

35. How long have you worked under the supervision of your current supervisor?

◯ Less than a year

◯ 1 to 2 years

◯ 3 to 5 years

◯ 6 to 9 years

◯ 10 to 14 years

◯ 15 to 19 years

◯ 20 to 24 years

◯ 25+ years

Appendix III – Questionnaire 1: Supervisores – Introversão e Extroversão no Local de Trabalho Portuguese Version)

Este questionário surge no âmbito do desenvolvimento da Tese de Mestrado para obtenção do grau de Mestre no curso de Gestão de Recursos Humanos e Consultadoria Organizacional facultado pelo ISCTE.

Esta Tese centra-se nas diferenças entre a Introversão e Extroversão no local de trabalho, procurando determinar se a eficácia na comunicação e liderança é influenciada pelos tipos de personalidade de Introversão e Extroversão. Para isso, foi necessário o desenvolvimento deste questionário que está dividido em dois: um para superiores hierárquicos, contando com um teste de personalidade e avaliação das competências de comunicação e liderança; e outro para os seus subordinados, que deverão avaliar os seus superiores mediante a sua satisfação com a comunicação e liderança dos mesmos. Para tal, os líderes terão de reencaminhar o questionário *Colaboradores: Introversão e Extroversão no Local de Trabalho* (https://forms.office.com/e/wGe0wMPMiJ) à sua equipa, facultando uma chave de identificação que irá ser criada na próxima fase deste questionário, possibilitando assim o cruzamento de dados.

Não obstante, todas as respostas providas neste questionário são confidenciais e irão ser utilizadas apenas para fins de pesquisa, não podendo ser partilhados com terceiros. A resposta ao mesmo não deverá demorar mais que 15 minutos. Contudo, em caso de dúvidas, poderei ser contactada através do seguinte email: mafsa2@iscte-iul.pt.

Posto isto, agradeço a sua participação neste questionário!

Consentimento Informado

1. Ao assinalar abaixo, indica que leu e compreendeu as informações fornecidas e concorda em participar voluntariamente neste estudo.

◯ Concordo em participar no estudo

Chave de Identificação

Como mencionado anteriormente, as respostas a este questionário são confidenciais. Contudo, como está dividido em duas partes é necessária a criação de uma chave de identificação que terá de fornecer aos seus colaboradores para posteriormente ser possível efetuar o cruzamento de dados.

2. Por favor, introduza a sua resposta conforme solicitado:

a) Segunda letra do seu nome próprio.

b) Terceira letra do seu último nome.

c) Dois últimos dígitos do seu ano de nascimento (ex.: 77).

d) Primeira letra do nome próprio da sua mãe.

No final, terá de obter uma chave idêntica a "AR99R" que deverá ser partilhada com a sua equipa.

Introduza aqui a sua resposta

Teste de Personalidade BIG 5

As seguintes afirmações apresentam características que se podem ou não aplicar a si. Por favor, responda a cada afirmação conforme a medida em que concorda ou discorda de cada afirmação.

Eu vejo-me como alguém que…	1	2	3	4	5
3. É falador/ comunicativo.					
4. Tende a ser crítico com os outros.					
5. Faz um trabalho minucioso.					
6. É depressivo, melancólico					
7. É original, tem ideias novas.					
8. É reservado.					
9. É prestável e altruísta com os outros.					
10. Pode ser um pouco desleixado.					
11. É descontraído, lida bem com o stress.					
12. Tem curiosidade sobre diversos temas.					
13. É cheio de energia.					
14. Se mete em conflitos com os outros.					
15. É um trabalhador de confiança.					
16. Pode ser tenso.					
17. É engenhoso/ imaginativo/ criativo, um pensador profundo.					
18. Instiga muito entusiasmo.					
19. Tem um carácter compreensivo.					
20. Tende a ser desorganizado.					
21. Se preocupa muito.					
22. Tem uma imaginação ativa.					
23. Tende a ser sossegado/ calado.					
24. Confia facilmente nos outros.					
25. Tem tendência para ser preguiçoso.					
26. É emocionalmente estável, não se chateia facilmente.					
27. É inventivo/ inovador/ criativo.					
28. Tem uma personalidade assertiva.					
29. Pode ser frio e desligado/ reservado.					

30. É persistente até terminar alguma tarefa.					
31. Pode ser mal-humorado.					
32. Valoriza as experiências relacionadas com beleza.					
33. É uma pessoa tímida, inibida.					
34. É atencioso e amável com quase toda a gente.					
35. Faz as coisas com eficiência.					
36. Mantém a calma em situações de stress.					
37. Prefere trabalhos rotineiros.					
38. É extrovertido, sociável.					
39. Por vezes é rude com os outros.					
40. Faz planos e cumpre-os.					
41. Fica nervoso facilmente.					
42. Gosta de refletir, de brincar com as ideias.					
43. Tem poucos interesses artísticos.					
44. Gosta de cooperar com os outros.					
45. Distrai-se facilmente.					
46. É sofisticado/ entendido em arte, música ou literatura.					

Competências de Comunicação

Estas questões têm o propósito de avaliar as competências de comunicação. Por favor, responda tendo em conta o seu comportamento habitual.

	1	2	3	4	5	6	7
47. Tenho um bom domínio da língua materna.							
48. Sou sensível às necessidades dos outros.							
49. Normalmente, vou direto ao assunto.							
50. Presto atenção ao que os outros me dizem.							
51. Lido eficazmente com os outros.							
52. Sou um bom ouvinte.							
53. Expresso as minhas ideias com clareza.							
54. Sou difícil de compreender quando falo.							
55. Geralmente digo a coisa certa na altura certa.							
56. É fácil falar comigo.							

Eficácia na Liderança

Por favor, responda às seguintes perguntas com base nos atributos, competências e qualidades que acredita que possui atualmente e não com base no que pensa que deveria possuir.

	0	1	2	3	4
57. Influencio os outros.					
58. Tenho autodisciplina.					
59. Tenho um bom historial de desempenho.					
60. Tenho uma forte capacidade de lidar com pessoas.					
61. Tenho a capacidade de resolver problemas.					
62. Não aceito o status quo, isto é, as condições existentes em determinado contexto. não me importo de quebrar algum padrão/ tradição.					
63. Vejo o panorama geral.					
64. Tenho a capacidade de lidar com o stress.					
65. Tenho um espírito positivo.					
66. Compreendo as pessoas.					
67. Estou livre de problemas pessoais.					
68. Estou disposto a assumir responsabilidades.					
69. Não tenho raiva.					
70. Estou disposto a fazer mudanças.					
71. Tenho integridade.					
72. Tenho valores fortes.					
73. Sou capaz de ver o que tem de ser feito a seguir.					
74. Sou aceite como líder pelos outros.					
75. Tenho a capacidade e o desejo de continuar a aprender.					
76. Tenho um jeito que atrai as pessoas.					
77. Tenho uma boa autoimagem.					
78. Tenho vontade de servir os outros.					
79. Tenho a capacidade de recuperar quando surgem problemas.					
80. Tenho a capacidade de desenvolver outros líderes.					
81. Tomo iniciativa.					

Caracterização Pessoal e Profissional

Nesta última secção, responda a algumas questões sobre si mesmo.

82. Género: ◯ Masculino ◯ Feminino ◯ Outro ◯ Prefiro não responder

83. Idade: _____ 84. Função atual: _____

85. Nível de educação:

◯ Secundário ◯ TeSP ◯ Licenciatura

◯ Mestrado ◯ Doutoramento ◯ Outro: _____

86 – Anos de Experiência na área:

◯ Menos de 1 ano

◯ 1 a 2 anos

◯ 3 a 5 anos

◯ 6 a 9 anos

◯ 10 a 14 anos

◯ 15 a 19 anos

◯ 20 a 24 anos

◯ 25 anos ou mais

87 – Antiguidade na função atual:

◯ Menos de 1 ano

◯ 1 a 2 anos

◯ 3 a 5 anos

◯ 6 a 9 anos

◯ 10 a 14 anos

◯ 15 a 19 anos

◯ 20 a 24 anos

◯ 25 anos ou mais

Muito obrigada pela sua colaboração!

Ressalvo que o sucesso desta investigação depende da resposta a um segundo questionário. Por favor, que não se esqueça de encaminhar o questionário abaixo para a sua equipa, juntamente com a chave de identificação:

a) Segunda letra do seu primeiro nome.

b) Terceira letra do seu sobrenome.

c) Últimos dois dígitos do ano do seu nascimento (por exemplo, 77).

d) Primeira letra do nome da sua mãe.

Questionário para colaboradores: https://forms.office.com/e/wGe0wMPMiJ

Appendix IV – Questionnaire 2: Employees: Introversion and Extroversion in the Workplace (Portuguese Version)

Este questionário surge no âmbito do desenvolvimento da Tese de Mestrado para obtenção do grau de Mestre no curso de Gestão de Recursos Humanos e Consultadoria Organizacional facultado pelo ISCTE.

Esta Tese centra-se nas diferenças entre a Introversão e Extroversão no local de trabalho, procurando determinar se a eficácia na comunicação e liderança é influenciada pelos tipos de personalidade de Introversão e Extroversão. Para isso, foi necessário o desenvolvimento deste questionário que está dividido em dois: um para superiores hierárquicos, contando com um teste de personalidade e avaliação das competências de comunicação e liderança; e outro para os seus subordinados, que deverão avaliar os seus superiores mediante a sua satisfação com a comunicação e liderança dos mesmos. Para tal, os líderes terão de reencaminhar o questionário Colaboradores: Introversão e Extroversão no Local de Trabalho à sua equipa, facultando uma chave de identificação, que irá ser pedida na próxima fase deste questionário, possibilitando assim o cruzamento de dados.

Não obstante, todas as respostas providas neste questionário são confidenciais e irão ser utilizadas apenas para fins de pesquisa, não podendo ser partilhados com terceiros. A resposta ao mesmo não deverá demorar mais que 10 minutos. Contudo, em caso de dúvidas, poderei ser contactada através do seguinte email: mafsa2@iscte-iul.pt.

Posto isto, agradeço a sua participação neste questionário!

Consentimento Informado

1. Ao assinalar abaixo, indica que leu e compreendeu as informações fornecidas e concorda em participar voluntariamente neste estudo.

◯ Concordo em participar no estudo

Chave de Identificação

Como mencionado anteriormente, as respostas a este questionário são confidenciais. Contudo, como está dividido em duas partes é necessária a criação de uma chave de identificação que terá de fornecer aos seus colaboradores para posteriormente ser possível efetuar o cruzamento de dados.

2. Insira a chave de identificação fornecida pelo seu chefe:

Introduza aqui a sua resposta

Satisfação com Comunicação com Superior

Responda de acordo com a sua opinião relativamente à comunicação entre si e o seu supervisor, com base na seguinte escala: 1 – Discordo totalmente; 2 – Discordo; 3 – Neutro; 4 – Concordo; 5 – Concordo totalmente.

	1	2	3	4	5

3. O meu superior fornece uma quantidade adequada de informações úteis que eu compreendo.					
4. O meu superior partilha e responde às informações relativas ao trabalho de forma atempada.					
5. My superior actively listen to my viewpoints.					
6. My superior always speaks politely and this motivates me to model him/ her.					
7. I know what I am expected to achieve when I am given a task at work.					
8. My superior maintains essential information flows to me.					

Eficácia da Liderança

Por favor, responda mediante a sua opinião relativamente à liderança do seu chefe, de acordo com a seguinte escala: 1 – Nunca; 2 – Raramente; 3 – Algumas vezes; 4 – Frequentemente; 5 – Várias vezes; 6 – Muito frequentemente; 7 – Sempre.

	0	1	2	3	4	5	6
9. Your boss has an attitude that makes you respect him/ her.							
10. You are proud to be associated with your boss.							
11. Your boss is concerned with teaching.							
12. Your boss instils confidence.							
13. Your boss makes team members do more than is expected.							
14. In an environment of change and new challenges, your boss is able to transmit "good energy".							
15. Your boss promotes a harmonious environment.							
16 Your boss helps you develop your strengths.							
17. You consider your team to be cohesive.							
18. Your boss promotes the sharing of information.							

Satisfação do Colaborador

Por favor, responda mediante a sua satisfação com o seu próprio trabalho, de acordo com a seguinte escala: 1 – Nunca; 2 – Raramente; 3 – Algumas vezes; 4 – Frequentemente; 5 – Várias vezes; 6 – Muito frequentemente; 7 – Sempre.

	0	1	2	3	4	5	6
19. You feel motivated in your workplace.							
20. You identify with the work team.							

21. You do more than your boss asks of you.							
22. You are committed to ensuring that the organisation's needs are met.							
23. You feel recognised for your work.							
24. You identify with your boss's leadership style.							
25. You trust the decisions made by your boss.							
26. You are creative in your workplace.							
27. You have an optimistic view of the company.							
28. You want to achieve success in the company.							

Caracterização Pessoal e Profissional

Nesta última secção, responda a algumas questões sobre si mesmo.

29. Género: ◯ Masculino ◯ Feminino ◯ Outro ◯ Prefiro não responder

30. Idade: _____

31. Função atual: _____

32. Nível de educação:

◯ Secundário ◯ TeSP ◯ Licenciatura

◯ Mestrado ◯ Doutoramento ◯ Outro: _____

33. Anos de Experiência na área:

◯ Menos de 1 ano

◯ 1 a 2 anos

◯ 3 a 5 anos

◯ 6 a 9 anos

◯ 10 a 14 anos

◯ 15 a 19 anos

◯ 20 a 24 anos

◯ 25 anos ou mais

34. Antiguidade na função atual:

◯ Menos de 1 ano

◯ 1 a 2 anos

◯ 3 a 5 anos

◯ 6 a 9 anos

◯ 10 a 14 anos

◯ 15 a 19 anos

◯ 20 a 24 anos

◯ 25 anos ou mais

35. Há quanto tempo trabalha com o seu supervisor atual:

◯ Menos de 1 ano

◯ 1 a 2 anos

◯ 3 a 5 anos

◯ 6 a 9 anos

◯ 10 a 14 anos

◯ 15 a 19 anos

◯ 20 a 24 anos

◯ 25 anos ou mais

Appendix V – Questionnaire 1: Superviseurs: Extraversion et Introversion sur le lieu de Travail (French Version)

Ce questionnaire a été élaboré pour ma thèse en vue de l'obtention d'un master en gestion des ressources humaines et conseil en organisation à l'ISCTE.

Cette thèse se concentre sur les différences entre l'Introversion et l'Extraversion sur le lieu de travail, cherchant à déterminer si l'efficacité dans la communication et le leadership sont influencés par les types de personnalités: Introversion et Extraversion. Pour ce faire, il a été nécessaire de développer ce questionnaire, qui est divisé en deux ; un pour les supérieurs hiérarchiques, avec un test de personnalité et une évaluation des compétences de communication et de leadership ; et un autre pour leurs subordonnés, qui devront évaluer leurs supérieurs en fonction de leur satisfaction à l'égard de leur communication et de leur leadership.

Cependant, toutes les réponses fournies dans ce questionnaire sont confidentielles et ne seront utilisées qu'à des fins de recherche et ne pourront pas être communiquées à des tiers. Répondre au questionnaire ne devrait pas prendre plus de 15 minutes. Toutefois, si vous avez des questions, vous pouvez me contacter à l'adresse électronique suivante: mafsa2@iscte-iul.pt.

Je vous remercie par avance d'avoir participé à ce questionnaire!

Consentement éclairé

1. En cochant la case ci-dessous, vous indiquez que vous avez lu et compris les informations fournies et que vous acceptez de participer volontairement à cette étude.

◯ J'accepte de participer à l'étude

Clé d'identification

2. Veuillez saisir votre réponse comme demandé :

a) Deuxième lettre de votre prénom.

b) Troisième lettre de votre nom de famille.

c) Les deux derniers chiffres de votre année de naissance (par exemple 77).

d) Première lettre du prénom de votre mère.

Au final, vous devrez obtenir une clé identique à « AR99R » que vous devrez partager avec votre équipe.

Saisissez votre réponse ici

Test de Personnalité BIG 5

Les affirmations suivantes sont des caractéristiques qui peuvent ou non s'appliquer à vous. Veuillez répondre à chaque affirmation en indiquant dans quelle mesure vous êtes d'accord ou non avec elle, dans quelle mesure: 1 – Fortement en désaccord; 2 – En désaccord un peu; 3 – Ni d'accord ni en désaccord; 4 – D'accord un peu; 5 – Fortement d'accord.

Je me vois comme quelqu'un qui...	1	2	3	4	5
3. Est bavard.					
4. A tendance à trouver des défauts chez les autres.					
5. Effectue un travail approfondi.					
6. Est dépressif, mélancolique.					
7. Est original, trouve de nouvelles idées.					
8. Est réservé.					
9. Est serviable et désintéressé envers les autres.					
10. Peut être quelque peu négligent.					
11. Est détendu, gère bien le stress.					
12. Est curieux de nombreuses choses différentes.					
13. Est plein d'énergie.					
14. Démarre des querelles avec les autres.					
15. Est un travailleur fiable.					
16. Peut être tendu.					
17. Est ingénieux, un penseur profond.					
18. Génère beaucoup d'enthousiasme.					
19. A une nature indulgente.					
20. A tendance à être désorganisé.					
21. S'inquiète beaucoup.					
22. A une imagination active.					
23. A tendance à être calme.					
24. Fait généralement confiance.					
25. A tendance à être paresseux.					

26. Est émotionnellement stable, pas facilement perturbé.					
27. Est inventif.					
28. A une personnalité assertive.					
29. Peut être froid et distant.					
30. Persévère jusqu'à ce que la tâche soit terminée.					
31. Peut être lunatique.					
32. Valorise les expériences artistiques et esthétiques.					
33. Est quelqu'un de timide, inhibé.					
34. Est attentionné et gentil avec presque tout le monde.					
35. Fait les choses efficacement.					
36. Rester calme dans des situations tendues.					
37. Préfère un travail routinier.					
38. Est extraverti, sociable.					
39. Est parfois impoli envers les autres.					
40. Fait des plans et les suit.					
41. Se met facilement nerveux.					
42. Aime réfléchir, jouer avec des idées.					
43. A peu d'intérêts artistiques.					
44. Aime coopérer avec les autres.					
45. Est facilement distrait.					
46. Est sophistiqué en art, musique ou littérature.					

Test de compétences en communication

Ces questions sont destinées à évaluer les compétences en matière de communication. Veuillez répondre en tenant compte de votre comportement habituel, en prenant en considération l'échelle suivante: 1 – Pas du tout d'accord; 2 – Légèrement en désaccord; 3 – Plutôt en désaccord; 4 – Indécis; 5 – Plutôt d'accord; 6 – Légèrement d'accord; 7 – Tout à fait d'accord.

	1	2	3	4	5	6	7
47. J'ai une bonne maîtrise de la langue.							
48. Je suis sensible aux besoins des autres sur le moment.							
49. En général, je vais droit au but.							
50. Je prête attention à ce que les autres me disent.							
51. Je m'entends bien avec les autres.							

52. Je suis un bon auditeur.							
53. J'exprime mes idées clairement.							
54. Je suis difficile à comprendre quand je parle.							
55. En général, je dis la bonne chose au bon moment.							
56. Je suis facile à aborder.							

Test d'efficacité du Leadership

Veuillez répondre aux questions suivantes sur la base des attributs, compétences et qualités que vous pensez posséder actuellement et non sur la base de ce que vous pensez devoir posséder. Répondez en fonction de l'échelle suivante: 0 – Jamais; 1 – Rarement; 2 – Parfois; 3 – Habituellement; 4 – Toujours.

	0	1	2	3	4
57. J'influence les autres.					
58. J'ai de l'autodiscipline.					
59. J'ai un bon dossier.					
60. J'ai de solides compétences relationnelles.					
61. J'ai la capacité de résoudre des problèmes.					
62. Je n'accepte pas le statu quo.					
63. Je vois le tableau d'ensemble.					
64. J'ai la capacité de gérer le stress.					
65. J'affiche un esprit positif.					
66. Je comprends les gens.					
67. Je suis exempt de problèmes personnels.					
68. Je suis prêt à assumer la responsabilité.					
69. Je suis exempt de colère.					
70. Je suis prêt à faire des changements.					
71. J'ai de l'intégrité.					
72. J'ai des valeurs fortes.					
73. Je suis capable de voir ce qui doit être fait ensuite.					
74. Je suis accepté en tant que leader par les autres.					
75. J'ai la capacité et le désir de continuer à apprendre.					
76. J'ai une manière qui attire les gens.					
77. J'ai une bonne estime de moi.					
78. J'ai une volonté de servir les autres.					

79. J'ai la capacité de rebondir lorsque des problèmes surviennent.					
80. J'ai la capacité de développer d'autres leaders.					
81. Je prends des initiatives.					

Caractérisation personnelle et professionnelle

Dans cette dernière section, répondez à quelques questions sur vous-même.

82. Genre: ◯ Homme ◯ Femme ◯ Autre ◯ Je préfère ne pas répondre

83. Âge: _____ 84. Função atual: _____

85. Niveau d'éducation:

◯ Lycée ◯ BAC ◯ License

◯ Master ◯ Doctorat ◯ Autre: _____

86 – Des années d'expérience dans le domaine:

◯ Moins d'un an

◯ 1 à 2 ans

◯ 3 à 5 ans

◯ 6 à 9 ans

◯ 10 à 14 ans

◯ 15 à 19 ans

◯ 20 à 24 ans

◯ 25 ans ou plus

87 – Antiguidade na função atual:

◯ Moins d'un an

◯ 1 à 2 ans

◯ 3 à 5 ans

◯ 6 à 9 ans

◯ 10 à 14 ans

◯ 15 à 19 ans

◯ 20 à 24 ans

◯ 25 ans ou plus

Merci beaucoup pour votre coopération!

Je tiens à souligner que le succès de cette recherche dépend de votre réponse à un second questionnaire. N'oubliez pas de transmettre le questionnaire ci-dessous à votre équipe, accompagné de la clé d'identification :

a) Deuxième lettre de votre prénom.

b) Troisième lettre de votre nom de famille.

c) Les deux derniers chiffres de votre année de naissance (par exemple 77).

d) Première lettre du nom de votre mère.

Questionnaire pour les employés: https://forms.office.com/e/wGe0wMPMiJ

Appendix VI – Questionnaire 2: Employees: Introversion and Extroversion in the Workplace (French Version)

Ce questionnaire a été élaboré pour ma thèse en vue de l'obtention d'un master en gestion des ressources humaines et conseil en organisation à l'ISCTE.

Cette thèse se concentre sur les différences entre l'Introversion et l'Extraversion sur le lieu de travail, cherchant à déterminer si l'efficacité dans la communication et le leadership sont influencés par les types de personnalités: Introversion et Extraversion. Pour ce faire, il a été nécessaire de développer ce questionnaire, qui est divisé en deux ; un pour les supérieurs hiérarchiques, avec un test de personnalité et une évaluation des compétences de communication et de leadership ; et un autre pour leurs subordonnés, qui devront évaluer leurs supérieurs en fonction de leur satisfaction à l'égard de leur communication et de leur leadership.

Cependant, toutes les réponses fournies dans ce questionnaire sont confidentielles et ne seront utilisées qu'à des fins de recherche et ne pourront pas être communiquées à des tiers. Répondre au questionnaire ne devrait pas prendre plus de 15 minutes. Toutefois, si vous avez des questions, vous pouvez me contacter à l'adresse électronique suivante: mafsa2@iscte-iul.pt.

Je vous remercie par avance d'avoir participé à ce questionnaire!

Consentement éclairé

1. En cochant la case ci-dessous, vous indiquez que vous avez lu et compris les informations fournies et que vous acceptez de participer volontairement à cette étude.

◯ J'accepte de participer à l'étude

Clé d'identification

2. Saisissez la clé d'identification fournie par votre patron:

Saisissez votre réponse ici

Questionnaire de satisfaction sur la communication

Répondez en fonction de votre opinion sur la communication entre vous et votre superviseur, sur la base de l'échelle suivante: 1 – Pas du tout d'accord; 2 – Pas d'accord; 3 – Neutre; 4 – D'accord; 5 – Tout à fait d'accord.

	1	2	3	4	5

3. Mon supérieur fournit des quantités suffisantes d'informations utiles que je comprends.					
4. Mon supérieur partage et répond aux informations en temps opportun.					
5. Mon supérieur écoute activement mes points de vue.					
6. Mon supérieur parle toujours poliment et cela me motive à le/la prendre pour modèle.					
7. Je sais ce que l'on attend de moi lorsque je reçois une tâche au travail.					
8. Mon supérieur maintient les flux d'informations essentielles vers moi.					

Efficacité du leadership

Veuillez donner votre avis sur le leadership de votre patron, selon l'échelle suivante: 0 – Jamais; 1 – Rarement; 2 – Quelques fois; 3 – Souvent; 4 – Plusieurs fois; 5 – Très souvent; 6 – Toujours.

	0	1	2	3	4	5	6
9. Votre patron a une attitude qui vous fait le respecter.							
10. Vous êtes fier d'être associé à votre patron.							
11. Votre patron se préoccupe de l'enseignement.							
12. Votre patron inspire confiance.							
13. Votre patron fait en sorte que les membres de l'équipe fassent plus que ce qui est attendu d'eux.							
14. Dans un environnement de changement et de nouveaux défis, votre patron est capable de transmettre une "bonne énergie".							
15. Votre patron favorise un environnement harmonieux.							
16. Votre patron vous aide à développer vos points forts.							
17. Vous considérez que votre équipe est soudée.							
18. Votre patron favorise le partage de l'information.							

Satisfaction des employés

Veuillez répondre en fonction de votre satisfaction à l'égard de votre propre travail, sur la base de l'échelle suivante: 0 – Jamais; 1 – Rarement; 2 – Quelques fois; 3 – Souvent; 4 – Plusieurs fois; 5 – Très souvent; 6 – Toujours.

	0	1	2	3	4	5	6
19. Vous vous sentez motivé(e) sur votre lieu de travail.							
20. Vous vous identifiez à l'équipe de travail.							

21. Vous faites plus que ce que votre patron vous demande							
22. Vous vous engagez à veiller à ce que les besoins de l'organisation soient satisfaits.							
23. Vous vous sentez reconnu(e) pour votre travail.							
24. Vous vous identifiez au style de leadership de votre chef.							
25. Vous faites confiance aux décisions prises par votre chef.							
26. Vous êtes créatif sur votre lieu de travail.							
27. Vous avez une vision optimiste de l'entreprise.							
28. Vous voulez réussir dans l'entreprise.							

Caractérisation personnelle et professionnelle

Dans cette dernière section, répondez à quelques questions sur vous-même.

29. Genre: ◯ Homme ◯ Femme ◯ Autre ◯ Je préfère ne pas répondre

30. Âge: _____

31. Função atual: _____

32. Niveau d'éducation:

◯ Lycée ◯ BAC ◯ License

◯ Master ◯ Doctorat ◯ Autre: _____

33 – Des années d'expérience dans le domaine:

◯ Moins d'un an
◯ 1 à 2 ans
◯ 3 à 5 ans
◯ 6 à 9 ans
◯ 10 à 14 ans
◯ 15 à 19 ans
◯ 20 à 24 ans
◯ 25 ans ou plus

34 – Antiguidade na função atual:

◯ Moins d'un an
◯ 1 à 2 ans
◯ 3 à 5 ans
◯ 6 à 9 ans
◯ 10 à 14 ans
◯ 15 à 19 ans
◯ 20 à 24 ans
◯ 25 ans ou plus

35. Depuis combien de temps travaillez-vous avec votre supérieur actuel?

◯ Moins d'un an
◯ 1 à 2 ans
◯ 3 à 5 ans

◯ 6 à 9 ans

◯ 10 à 14 ans

◯ 15 à 19 ans

◯ 20 à 24 ans

◯ 25 ans ou plus