



The Impact of Leadership on the Perception of Organizational Belonging and the Mediating Effect of Job Crafting on IT Workers in Portugal

Master degree in Management

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**The Impact of Leadership on the Perception of
Organizational Belonging and the Mediating Effect
of Job Crafting on IT Workers Working Remotely
in Portugal**

Master degree in Management

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Dissertation under the supervision of Professor Neuza Ribeiro and Professor Daniel Gomes

Leiria, September of 2025

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Dedication

I dedicate this work to my children who propel me to be a better human being every day.

Acknowledgments

I thank Professor Neuza Ribeiro for inspiring me to go beyond, and Professor Daniel for his unwavering support. Their guidance was instrumental throughout this journey. I am deeply grateful to both.

Abstract

This study investigates the impact of leadership on organizational belonging among IT workers in Portugal, focusing on the mediating effect of job crafting. Using validated scales, a questionnaire was applied to measure these constructs, collecting data from IT workers from various organizations operating in Portugal, working full or partially remote. Despite growing interest in leadership and employee engagement, limited research has explored how leadership styles influence organizational belonging through job crafting, particularly in the IT sector. To address this gap, our work was arranged in the form of two studies where we intend to measure the direct effect of different styles of leadership on job crafting and organizational belonging, the direct effect of job crafting on organizational belonging and the mediating effect of job crafting between leadership and organizational belonging. Study 1 examined the direct and indirect effects of empowering leadership on job crafting and organizational belonging. Study 2 expanded the model to include five leadership behavioural types (aversive, directive, transactional, transformational and empowering), assessing their individual impacts on job crafting and organizational belonging. For study 1, a cross-sectional study design was followed, delivering a sample of 213 participants of IT workers. For study 2, a time-lagged research design was implemented across a two-wave questionnaire to reduce common method bias and strengthen causal inference, with a total of 121 participants working on an IT company in Portugal. Results show that empowering leadership significantly enhances both job crafting and organizational belonging, with job crafting partially mediating this relationship. By understanding these dynamics, organizations can better design leadership development programs and job structures that enhance employee well-being and organizational performance.

Keywords: Organizational Belonging, Leadership, Job Crafting, IT workers in Portugal, Remote work.

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List of Abbreviations and Acronyms

BC	Bias Corrected
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
ESTG	School of Technology and Management
IFI	Incremental Fit Index
IPL	Instituto Politécnico de Leiria
IT	Information Technology
JC	Job crafting
OB	Organizational Belonging
PT	Portugal
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modelling

1. Introduction

The rapidly evolving context of the Information Technology (IT) sector requires adaptive leadership styles that can foster a sense of belonging among employees. This sense of belonging is crucial, as it is directly linked to increased job satisfaction (L. Zhao et al., 2012).

Workers in IT companies experience a very specific context, rarely seen in other working areas. IT companies tend to be flexible on remote work policies. So, in many cases the employees are not physically on the company or client offices, and therefore, mainly working with the team remotely. Additionally, IT workers tend to change client, project and/or team quite often.

Given the prevalence of remote work and frequent contextual changes, how do these workers experience organizational belonging? What makes IT workers feel they belong to that company, preventing them from changing company more often?

Empowering leadership, characterized by leaders who support autonomy and encourage involvement in decision-making, has been shown to significantly impact employees' intrinsic motivation (Zhang & Bartol, 2010).

So, with a highly flexible work style and widespread remote work, leadership dynamics and its effects on organizational belonging face unique challenges and opportunities (Sjöblom et al., 2022). Within this sector, the role of job crafting – a process where employees proactively modify their tasks to better fit their skills and personalities (Wrzesniewski & Dutton, 2001) – emerges as a potential mediator in the relationship between leadership and organizational belonging.

Job crafting enables employees to align their work with their personal strengths and passions, enhancing job satisfaction (Berg et al., 2013), which significantly influences organizational commitment (Porter et al., 1974).

When leaders empower their employees, they not only facilitate an environment conducive to job crafting but also reinforce employees' intrinsic motivation and engagement (Tims et al., 2012). This mediating effect of job crafting is particularly relevant in the IT sector, where rapid technological changes and project-based work structures require employees to constantly adapt and innovate.

Despite growing interest in leadership and job crafting, we found no studies which have examined their combined impact on organizational belonging. Given our geography we would like to take advantage of our geography and concentrate our research to the Portuguese IT sector. **To what extent does empowering leadership influence the sense of organizational belonging among IT workers in Portugal, and how does job crafting mediate this relationship?**

This thesis comprises two interrelated studies that explore the relationship between leadership and organizational belonging in the IT sector in Portugal.

The first study investigates the impact of empowering leadership on the perception of organizational belonging among IT workers in Portugal and to evaluate the mediating effect of job crafting in this relationship. In this study, we want to understand how leaders who promote autonomy and participation can influence employees' sense of connection to their organization, especially in a context marked by remote work and frequent team changes.

As a logical extension of the first study's focus, the second study expands the scope by comparing the effects of a set of different leadership styles (Aversive, Directive, Transactional, Transformational and Empowering) on employees' sense of belonging in the IT sector in Portugal. This wider analysis provides a more comprehensive understanding of how different leadership approaches shape belonging in the dynamic environment of the IT industry in Portugal.

By understanding these dynamics, organizations can better design leadership development programs and job structures that enhance employee well-being and organizational performance.

2. Literature Review

In order to respond to our investigative question, we will present and clarify the constructs considered on our study: Organizational Belonging, Leadership and Job Crafting. While considering leadership in our work, we will be comprising 5 leadership behavioural types: aversive, directive, transactional, transformational and empowering leadership.

Belonging has long been recognized as one of the most fundamental needs of the individual, since Maslow's hierarchy of needs (Maslow, 1943). However, as research evolved throughout the years, it became clear that the sense of belonging has many standpoints. Only recently, the organizational sense of belonging emerged, apart from the general sense of belonging.

As for leadership, it is known to have a significant impact on individuals' actions, thoughts and emotions (Bligh et al., 2007; Young et al., 2021; Yun et al., 2006). Given that leadership can assume various styles and formats the outcomes can vary in the same measure. Additionally, it is also important to acknowledge that leaders can shift between leadership behavioural types, adapting their response to the given context.

With our work we seek to evaluate the impact of a set of leadership behavioural types (commonly labelled as positive or negative) on the individual's sense of belonging to the organization. Will a more positive and modern leadership, such as empowering leadership increase the worker's sense of belonging to the organization?

With the intent to add depth to our study, we added the job crafting to the equation. Since job crafting is a process initiated by the individual in an autonomous way (Berg et al., 2013), will the presence of job crafting be increased by the autonomy augmented by empowering leadership? And since job crafting are adaptations introduced by the individual making the work more approximate to his/her own ideal, will it impact the sense of belonging to the organization?

2.1. Leadership

Leadership is as old as human history, many times being difficult to separate the greatest leaders from mankind history. Even though the notion of leadership has been the subject of

study for centuries, the concept of leadership has evolved rapidly during the last decades due to its key role on organizational management.

Traditionally, the leader was seen as someone who had the capacity to influence others, either by power or authority (Manz & Sims, 1991). Then, leadership theories evolved from this trait based innate great leaders, to an “Influence Era” where leadership was recognized as a relationship rather than solely based on the leaders’ characteristics (Van Seters & Field, 1990). Subsequently, investigation evolved to behavioural theories shifting focus to what leaders do instead of what leaders are, introducing the idea that leadership can be learned (Van Seters & Field, 1990). Next, theories of contingency and situational leadership were formulated, proposing leadership is more than a leader-subordinate equation, and it should be adapted according to the context (Van Seters & Field, 1990). Next, transactional and transformational leadership theories were popularized, each focusing on rewards or inspiration and motivation to excel (Van Seters & Field, 1990). More recently, empowering (Hoang et al., 2021), servant (Mcquade et al., 2021) and authentic leadership (Semedo et al., 2018; Yasin et al., 2024) became the more prevalent theories, trying to accommodate the ethics and moral values to the already existent dimensions of leadership.

This historical context is important to understand, since our work intends to measure the presence of a set of distinct leadership behavioural types, that are the product of the overall evolution of this construct. It is important to clarify that leadership behavioural types refer to distinct patterns of observable actions that leaders consistently exhibit in their efforts to influence, guide, and support others. These behaviours reflect underlying leadership philosophies and are typically categorized based on how leaders motivate, communicate, make decisions, and respond to challenges (Yukl et al., 2002). This classification focuses on what leaders do, rather than focusing on personality traits or situational factors. This behavioural lens allows researchers to assess leadership impact more precisely, based on tangible actions (Yukl et al., 2002).

On Study 1 our work is grounded on empowering leadership only. On Study 2, we aim to measure a set of distinct leadership behavioural types. So, we selected a model assembled by Pearce & Sims (2002) that include five types of leader behaviour: aversive, directive, transactional, transformational and empowering. This model is the result of the aggregation of aversive leadership to the previous model which articulated four types of leadership (directive, transactional, transformational and empowering). The aversive component was

introduced as a split of the directive behavioural type (Pearce et al., 2003). This way the resultant model integrates the directive pattern (direct and aversive natures), as well as transactional-transformational and consideration-initiation concepts.

In this section we will provide an historical analysis on each leadership behavioural type present in the selected model, in the previous given order.

Leadership	Pearce & Sims (2002)	
Behavioural Type	Representative behaviours	Theoretical bases
Aversive	(a) engaging in intimidation (b) dispensing reprimands	Theory X (McGregor, 1960) Ohio State studies (Fleishman, 1953)
Directive	(a) issuing instructions commands (b) assigning goals	Michigan studies (Katz et al., 1950, 1951)
Transactional	(a) providing personal reward (b) providing material rewards (c) managing by exception (active) (d) managing by exception (passive)	Expectancy theory (Vroom, 1964) Exchange-equity theory Adams (1963; Homans, 1958, 1961) Reinforcement theory (Kreitner & Luthans, 1984; Podsakoff et al., 1982; Podsakoff & Todor, 1985)
Transformational	(a) providing vision (b) expressing idealism (c) using inspirational communication (d) having high performance expectations (e) challenging the status quo (f) providing intellectual stimulation	Sociology essays on charisma (Weber, 1946) Charismatic leadership theory (House, 1977) Transforming/transformational leadership (Avolio & Bass, 1988)
Empowering	(a) encouraging independent action (b) encouraging opportunity thinking (c) encouraging teamwork (d) encouraging self-development (e) participative goal setting (f) encouraging self-reward	Behavioural self-management (Mahoney & Thoresen, 1972) Social cognitive theory (Bandura, 1986)

Table 1 – Theoretical bases and representative behaviours of our model’s leadership styles

2.1.1. Aversive Leadership

Not all leadership behaviours are positive for the organization and their employees. Aversive leadership is a destructive type of leadership, characterized by intimidation, threat and punishment (Pearce & Sims, 2002).

In aversive behaviours leaders tend to present authoritarian traits based on coercive power. Usually stemming from a belief that more supportive or participative approaches are ineffective (House & Howell, 1992). Research suggests that leaders who focus mainly on performance outcomes are more likely to undervalue the impact of aversive behaviours on others (Bligh et al., 2007).

As stated before, aversive leadership was considered a dimension within directive leadership being segregated as an independent behavioural type of leadership by Pearce et al. (2003). Meaning both behavioural types of leadership are based on the same theories (detailed on directive leadership section), differing only on the behaviours displayed.

We considered aversive leadership on our work because, despite its detrimental effect, aversive behaviour is likely to persist in organizational context (Arvey & Ivancevich, 1980). Also, because we aim to shed light on employees' sense of belonging and aversive leadership is associated with lower levels of job satisfaction (Arvey & Ivancevich, 1980; Bligh et al., 2007).

According to the model applied in our work, aversive leadership representative behaviours are (a) engaging in intimidation and (b) dispensing reprimands (Pearce & Sims, 2002).

2.1.2. Directive Leadership

Directive leadership, grounded in positional power, is frequently misinterpreted as aversive or authoritarian. In early leadership research, it was referred to as legitimate power, defined as internalized values dictating that the leader has the legitimate right to influence some individual, who has the obligation to follow the leader's instructions (French & Raven, 1959).

This type of leadership relies on the leader providing structure and orientation by issuing instructions and commands to subordinates. Differing from aversive leadership by excluding the aversive behaviours, like intimidation and admonishments (Pearce & Sims, 2002).

Research comparing the impact of directive leadership and empowering leadership on team performance (Lorinkova et al., 2013), concluded that structure and direction provided by directive leadership leverages team performance during the early stages of team formation. On the other hand, empowering leadership (detailed on a further section) offers continued improvement, given the constant team learning and coordination practices, making it more effective over time.

Directive leadership is the result of the aggregation of Theory X (McGregor, 1960) to the foundational work given by the Ohio State studies (Fleishman, 1953) and Michigan studies (Katz et al., 1950, 1951).

Theory X views employees as dependent on close supervision and control to ensure organizations' goals, as it assumes individuals have an inherent dislike of work and are avoidant of responsibility (McGregor, 1960). Directive Leadership aligns with Theory X, as it emphasizes control, structure, and authority.

As for Ohio State and Michigan studies, these identified two key dimensions to leadership behaviour each. The first identified "initiating structure", a task-oriented behaviour of organizing work, and "consideration", a relationship-oriented behaviour like building trust (Fleishman, 1953). The second identified "task-oriented leadership", focused on productivity and goal achievement, and "employee-oriented leadership", focused on interpersonal relationships and employee's well-being (Katz et al., 1950, 1951). Directive leadership aligns with both studies by corresponding to the task-oriented style, prioritizing performance and structure over relational aspects. As well as being rooted in the initiating structure dimension of the Ohio State Study, emphasizing task clarity and control.

According to the model used on our work, representative behaviours of the directive leadership style include (a) issuing instructions and commands and (b) assigning goals (Pearce & Sims, 2002).

2.1.3. Transactional Leadership

Transactional leadership concept was first introduced as a theory suggesting that the leader-employee relationship is based on an exchange of power and benefits (Burns, 1978). This behavioural leadership type is based on the idea that individuals' behaviour is oriented to maximize the return expected in consequence of their performance (Pearce & Sims, 2002).

Therefore, this leadership style focuses on making clear the potential reward according to the applied effort (Pearce & Sims, 2002).

The concept of transactional leadership definition was formed by three different theories (Pearce & Sims, 2002): the expectancy theory by (Vroom, 1964); the exchange-equity theory by Adams (1963; Homans, 1958, 1961) and Homans (1958, 1961); and the reinforcement theory by (Kreitner & Luthans, 1984; Podsakoff et al., 1982; Podsakoff & Todor, 1985) and . The expectancy theory proposes that motivation is driven by the expectation of reward, following good performance resultant of effort (Vroom, 1964). The exchange-equity theory complements the model by suggesting that individuals compare the ratios of their contributions to the received rewards. If they perceive this ratio as unequal, it generates a sense of inequity, which may lead individuals to adjust their contributions or rewards seeking a balanced exchange (Adams, 1963; Homans, 1958, 1961). Finally, the reinforcement theory strengthens the prior two theories by stating that behaviours can be encouraged or discouraged through applied consequences (Kreitner & Luthans, 1984; Luthans & Kreitner, 1985; Podsakoff et al., 1982; Podsakoff & Todor, 1985).

These theoretical foundations help explain how transactional leadership operates in organizational settings. Although transactional leadership is known to be the most prevalent leadership style (Young et al., 2021), research shows high variances of efficacy among sectors and contexts. Being focused on goal achievement and performance management, it is especially effective in contexts with clear goals and rules and demanding of immediate compliance (Dong, 2023). In contrast, it is less effective in dynamic or creative environments (Dong, 2023).

While transactional leadership may be an available tool to improve organizational performance (Dong, 2023), modern research suggests it should be balanced with other leadership styles, to guarantee innovation and persistent growth (Dong, 2023).

Applied to our behavioural leadership model, transactional leadership representative behaviours are (a) providing personal reward, (b) providing material rewards, (c) managing by exception (active), and (d) managing by exception (passive) (Pearce & Sims, 2002).

2.1.4. Transformational Leadership

Transformational leadership is considered a “neo-charismatic” model of leadership, characterized by leaders who are able to motivate colleagues and followers to view their

work from new perspectives. “Transformational” leaders influence others to maintain focus on the vision and mission of both their team’s and organizations, while making an effort to reach higher levels of competence and investing in the interests (Alimo-Metcalfe, 2013).

It is based on the transactional-transformational paradigm, differing from transactional leadership by being more than established exchanges and agreements (Kelly, 1999). Historically, it emerges from the sociology research on charisma (Weber, 1946), from the charismatic leadership theory (House, 1977), and transforming/transformational leadership (Avolio & Bass, 1988).

Charisma is the term often used to describe leaders who by force of their personal abilities are capable of having a profound and extraordinary effect on others (Weber, 1946). The initial charismatic leadership theory stated that these leaders inspire devotion and loyalty by embodying a compelling vision and demonstrating strong convictions (Weber, 1946). This theory kept being revised and later it was complemented by detailing charismatic leaders’ behaviours to influence (House & Howell, 1992). These behaviours include impression management, articulation of ideologic goals, definition of subordinate roles in terms of ideological values, role modelling, communication of high expectations and confidence in subordinates, and engagement in behaviour designed to stimulate appropriate follower motives. More recently, the behaviours contained in Bass’s model were revised as (a) charismatic leadership (or idealized influence), (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration (Bass, 1998).

On another thread of investigation, the distinction of transactional and transformational leadership behaviours was made clearer (Burns, 1978). The term “Transformational Leadership” was only fully established when these concepts were operationalized and empirically tested (Avolio & Bass, 1988).

It is important to note that “charisma”, a base of transformational leadership, has neutral value as it cannot be distinguished as good or bad, moral or immoral (Howell, 1992). And in consequence, concerns have been raised about potential misuse of the transformational leader’s influence (Howell, 1992). Transformational leaders can change colleagues and followers’ values and vision of the future (Asbari et al., 2020), which can happen with disregard for ethical considerations.

As for its operationalization, research suggest that transformational leadership is more effective in project-based organizations, which are characterized by high levels of change and complexity (Abbas & Ali, 2023), and therefore demanding of flexibility. It also indicates that transformational leaders tend to find more difficult to influence bigger teams. As the team enlarges, it becomes harder to apply idealized influence, individualized attention, and inspirational motivation since it demands effective dedicated communication through personal interactions (Abbas & Ali, 2023).

Representative behaviours of transformational leadership, according to our model are (a) providing vision, (b) expressing idealism, (c) using inspirational communication, (d) having high performance expectations, (e) challenging the *status quo*, and (f) providing intellectual stimulation (Pearce & Sims, 2002).

2.1.5. Empowering Leadership

Empowering leadership has roots in the behavioural self-management which comes from clinical psychology (Mahoney & Thoresen, 1972). Later it was applied to organizations presented as self-management practices instead of leadership (Manz & Sims, 1980).

It is characterized by the mindset of leading others to lead themselves and has been called “SuperLeadership” by Manz & Sims (1991). Empowering leadership is grounded on the social cognitive theory, which describes a triadic reciprocal relation between individual, environment and behaviour. According to this theory, individuals influence their environment through their behaviour, which in turn influences the individual (Bandura, 1986). Another principle of social cognitive theory is the understanding on how modelling behaviour can influence individual behaviour (Bandura, 1986). Empowering leadership proposes that the leader must model appropriate self-leadership behaviours, so subordinates can adopt and mimic such behaviours.

While transformational leadership focuses on vision and inspiration, empowering leadership emphasizes autonomy and self-regulation. It also diverges from transactional leadership by minimizing hierarchical control while fostering self-directed behaviour.

In contemporary organizations, especially those embracing agile methodologies or remote work structures like IT companies, empowering leadership has gained prominence due to its emphasis on autonomy, adaptability, and intrinsic motivation (Zhang & Bartol, 2010; E. Zhao, 2024).

Some studies suggest that empowering leadership is positively correlated with job satisfaction, creativity (Zhang & Bartol, 2010) and employee engagement (Gyu Park et al., 2017), particularly in knowledge-intensive sectors (Chuang et al., 2016; Froese et al., 2025).

Despite its benefits, empowering leadership may face challenges in organizations with rigid hierarchies or cultures that resist decentralization. Additionally, some individuals may not be suited for autonomy, or not feel ready (Yun et al., 2006). Leaders must assess team readiness and provide adequate support to ensure successful implementation.

As a result, empowering leadership representative behaviours according to our model are (a) encouraging independent action, (b) encouraging opportunity thinking, (c) encouraging teamwork, (d) encouraging self-development, (e) participative goal setting and (f) encouraging self-reward (Pearce & Sims, 2002).

2.2. Job Crafting

For decades, organizational research mainly focused on individual determinants and external characteristics of jobs. These included factors such as personal expectations and values (Dubin, 1956; Lodahl & Kejnar, 1965; Roberson, 1990), as well as work tasks and social interactions in the workplace (Griffin, 1987; Hackman & Oldham, 1980). This approach minimized the role of workers in actively shaping their tasks and the social interaction that constitute a job (Wrzesniewski & Dutton, 2001).

In fact, dimensions such as job boundaries, work identities or the meaning of the work are not formally determined most of the times, giving the worker freedom to adjust how to perform the job (Wrzesniewski & Dutton, 2001).

The term “job crafting” was first set in 2001, along with its definition as the physical and cognitive changes employees make in their tasks or the relational boundaries of their work (Wrzesniewski & Dutton, 2001). Although the concept of employees redesigning their jobs, with or without their management involvement, has appeared in academic literature long before (Caplan, 1987; Kulik et al., 1987).

Job crafting is a bottom-up process, as it is initiated by employees without explicit authorization of the employer (Hornung et al., 2010) In contrast work redesign is a top-down process, a formal rearrangement of jobs and its tasks, initiated by management (Hackman & Oldham, 1980). While top-down work redesign is typically a time framed process, job

crafting is an ongoing process. It evolves, in a flowing way, according to changes in personal preferences and organizational demands (Hornung et al., 2010).

Recent numbers indicate that workers are increasingly actively directing their own careers, rather than following the conventional paths internally set by companies (Kim & Yoon, 2024). In response, to attract and maintain their talent, leading global companies are investing on employees' autonomy (Kim & Yoon, 2024). And job crafting presents itself as one of the available strategies for organizations to be recognized as different, with an advantage on the work environment and marketplace (Kim & Yoon, 2024).

Job crafting may take three forms, identified as task crafting, relational crafting and cognitive crafting (Wrzesniewski & Dutton, 2001). There is task crafting when workers alter the type, number, content or scope of their tasks and work routines (Ghitulescu, 2007). There is relational crafting when changes are made to the range, nature or frequency of interactions performed (Ghitulescu, 2007). There is cognitive crafting when changes are made to the meaning or perception of work in comparison to how others view the same job (Wrzesniewski & Dutton, 2001).

The presence of job crafting has many documented positive results on both individual and group levels. Research has showed that job crafting may bring boosted performance (J. Y. Lee & Lee, 2018), improved well-being (Plomp et al., 2016), enhanced work meaningfulness and identity (M. Kim & Beehr, 2018), and improved job and career satisfaction (Ghadi & Almanaga'h, 2020).

Also, on an organizational level it positively impacts organizational commitment (Wang et al., 2018) and prosocial behaviours (Ding et al., 2020). As for the impact of job crafting on the workers sense of belonging to the organization we did not find research relating these two topics.

However, extensive job crafting unaligned with organizational objectives and strategies might bring severe difficulties (Hornung et al., 2010). For that reason, job design conventionally restricts the worker freedom to apply job crafting (Hornung et al., 2010). On the other hand, in modern work environments increasing job crafting may represent a competitive advantage (Wrzesniewski & Dutton, 2001).

2.3.Organizational Belonging

Research on belonging dates back several decades, originally emphasizing interpersonal and societal dimensions, before expanding into organizational contexts.

Early research establishes belonging as a fundamental human necessity and a powerful source of motivation (Maslow, 1954). It was initially described as a strong desire to form and to maintain positive lasting interpersonal attachments (Baumeister & Leary, 1995) and considered an essential part of an individual's mental health (Hagerty et al., 1992).

Belonging is a multidimensional concept as individuals do not sense belonging solely to one group or place, as it involves the individual's identity in interaction with other individuals, within social contexts and places, including organizations (May, 2011).

For a long time, belonging was studied as an aggregated construct of general belonging, ignoring context specifics such as the organizational ecosystem (Jena & Pradhan, 2018). Organizational belonging seems to have derived from prior research on perceived insider status, that stated that employees must believe that their contributions are valued by the organization before perceiving that they truly belong to the organization (Stamper & Masterson, 2002).

For our research we will focus on organizational belonging, which can be defined as the employee experiencing an acknowledgment of his talents, interests and experiences, and finding acceptance of his self-expression of these on the organizational environment (Belle et al., 2015).

Recent research on this topic established that in order for an employee to have a sense of organizational belonging, they have to feel a connection to the organization, feeling like an appreciated team member, as well as feeling they can be themselves at work, and believe that anyone can succeed to their full potential at the company, no matter who they are (Blau et al., 2023).

It is important to refer that workplace belonging and organizational belonging, while often used interchangeably, are distinct concepts. While workplace belonging refers to the feeling of connection and inclusion within a work team or group, organizational belonging refers to a broader sense of connection to the entire organization. For example, employees may feel

a strong workplace belonging within their team but not feel a sense of belonging to the larger organization, or the other way around.

Most existent R&D focuses on workplace belonging, while few studies mention organizational belonging. However, given the constant change of projects and teams for IT workers, we wish to focus our work on organizational belonging as we consider it of superior value in this context, in comparison to workplace belonging.

Given the complex nature of organizational belonging, it is essential to use a structured framework to assess how employees experience it in practice. Therefore, we selected the 4-factor scale proposed by Blau et al. (2023). This scale has a total of 16 items, distributed by the factors: (a) be myself, (b) acceptance, (c) diversity valued, and (d) connection. It is the result of a review of prior conceptual and empirical work related to organizational belonging, culminating in a proposed new scale.

Research has shown that organizational belonging has a positive impact on productivity through the “be myself” factor, as well as on the intention to stay through “acceptance” factor (Blau et al., 2023). On our studies we aim to understand, on the opposite direction, if different leadership behavioural types and the presence of job crafting can influence the individual’s sense of belonging to the organization. In consequence, if this positive relation is found, organizations may benefit from encouraging these practices that foster organizational belonging.

For IT organizations the sense of belonging towards the organization presents as a challenge that seems to grow every year, partly because of common remote work that diminishes workers informal activities and therefore leaves employees feeling less connected to their organization (Blau et al., 2023).

2.4.Remote work

Even though remote work was not a central construct in either studies conducted for this thesis, it is an unavoidable topic when examining IT professionals.

Commonly referred to as remote work, telework was early defined as a way of working remotely for an employer, requiring electronic processing of information and using telecommunications to keep contact between employer and employee (Gray et al., 1993).

Later it was simplified to refer to work performed remotely through the use of information and communication technologies (Sullivan, 2003).

As a highly technology-driven industry, IT often relies on remote collaboration across multi levels. Employees may be working from home; be globally distributed across company offices in different regions or collaborate remotely with clients (Froese et al., 2025).

Remote work is linked to a better performance, allowing employees to be more focused and task-oriented (Attfield & Barth, 2021). By eliminating the interruption of non-work-related interactions with co-workers, the employees get more productive but simultaneously tend to feel more isolated (Attfield & Barth, 2021).

During the COVID-19 pandemic, many jobs shifted to remote formats whenever possible to maintain operations while minimizing health risks (Diab-Bahman & Al-Enzi, 2020). This period highlighted the benefits of remote work, such as the elimination of commuting and improved work-life balance (Diab-Bahman & Al-Enzi, 2020). In consequence, some studies suggest, people tend to prefer flexible work arrangements that include remote work (Anik & Habib, 2025). These changes brought uncertainty into current organizational structuring, demanding new models of work and management (Soga et al., 2022).

Remote work has also influenced hiring dynamics, as increased flexibility appears to have made job switching easier for employees (Laker, 2022). However, empirical research on this trend remains limited (Makridis & Schloetzer, 2024). Preliminary results of empirical studies suggest having flexible work arrangements may not be enough to ensure workers commitment (Makridis & Schloetzer, 2024).

This presents a new challenge to employers, who needed to address these changes to attract and maintain its talent (De Smet et al., 2022).

The widespread adoption of remote work has contributed to a sense of reduced interpersonal connection among employees (Blau et al., 2023). As a result, organizations must find new ways to foster a sense of belonging within remote and hybrid teams, renewing interest in the study of organizational belonging (Blau et al., 2023; Hafermalz & Riemer, 2021).

3. Conceptual Model and Hypotheses

This work was inspired by the perception that high flexible context of IT workers, being recurrently changing project and/or client even within the same company, makes turnover a constant challenge in IT organizations (Wróbel, 2023). Specially, when remote or hybrid arrangements occur, since workers do not attend the organizations workplace so often.

There has been a tendency on IT companies worldwide, as well as in Portugal, to try to re-establish the presential work, demanding people to go back to office 2 or 3 times per week (Wróbel, 2023). However, with the remote work generalization, companies have made many internal changes that difficult this operationalization, such has reduced the number of seats available at the office (Wróbel, 2023) or even recruiting employees regardless of their geography (Froese et al., 2025).

Additionally, many workers highly value remote work (Anik & Habib, 2025) and its benefits, such as work-life balance and geographic flexibility, for example to live away from big cities. In consequence, as Portuguese companies try to enforce presential work, it is expected these workers will have higher turnover intentions (there were found no research on this phenomenon so far).

Believing the past models of being physically present at the workplace are no longer valid for this modern context, we consider R&D can help provide future direction to IT organizations. Research can help by identifying mechanisms that can lower employees' turnover intentions or identify practices that increase employees' sense of connection to the organization, even at a distance.

Maintaining this line of thought, since organizational belonging has been linked to lower turnover intentions (Chakraborty et al., 2024; Zielińska et al., 2025) we selected this construct as our dependent variable, elaborating two studies to examine organizational belonging on IT workers in Portugal.

3.1. Study 1 Model

Organizational scholarship theory emphasizes the role of leadership in shaping employees' psychological experiences within the workplace. According to Caza & Caza (2008), leadership is not only a mechanism for directing one's behaviour but also a relational process that contributes to the construction of meaning and identity in organizational life. Recent research also shows that empowering leadership fosters autonomy and self-responsibility (Grass et al., 2020), making employees' feel like valid contributors to their teams, projects and ultimately to their organizations (M. C. C. Lee et al., 2016).

Drawing on Self-Determination Theory (Deci & Ryan, 1985), empowering leadership can be understood as a leadership style that fosters the satisfaction of employees' basic psychological needs for autonomy, competence, and relatedness. By granting employees greater discretion, encouraging participation in decision-making, and providing meaningful feedback, empowering leaders enhance employees' sense of agency and mastery, while simultaneously cultivating a supportive and inclusive climate. According to the theory, the fulfillment of these needs nurtures intrinsic motivation and strengthens employees' feelings of connection with their social environment. Consequently, when employees perceive their leaders as empowering, they are more likely to experience a stronger sense of belonging to the organization, as their psychological needs are acknowledged and supported. This theoretical lens therefore explains why empowering leadership positively impacts employees' organizational belonging.

Based on this theoretical foundation, we established our first hypotheses: Is it possible that empowering leadership may have a positive impact on the employees' sense of organizational belonging?

H1: Empowering Leadership positively impacts employees' sense of organizational belonging.

On the same direction, since job crafting relies on the latitude available to employees to execute and modify their tasks, could self-management practices provided by empowering leadership behaviours (M. C. C. Lee et al., 2016) influence positively the presence of job crafting?

Grounded in the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007), empowering leadership can be understood as a critical job resource that stimulates

employees' proactive behaviors. By granting autonomy, sharing information, and encouraging participation in decision-making, empowering leaders increase the availability of key resources that enhance employees' motivation and capacity to actively shape their work environment. According to the JD-R framework, the presence of such resources not only fosters engagement but also encourages employees to proactively optimize their tasks, relationships, and work context through job crafting. Thus, empowering leadership behaviors create the conditions under which employees feel both enabled and motivated to engage in job crafting, supporting the proposition that empowering leadership positively impacts its presence.

H2: Empowering Leadership positively impacts the presence of job crafting.

Also, knowing job crafting allows employees to adjust their tasks in ways that approximates their job to their personal ideal impression (T. Esteves & Pereira Lopes, 2017), and being organizational belonging dependent on the sense of being a valued contributor of the organization, is it possible that the presence of job crafting augments the employees' sense of belonging to the organization? Moreover, job crafting has been associated with psychological ownership and work attachment, which ultimately may increase the sense of organizational belonging (Wang et al., 2018).

H3: Job crafting positively impacts employees' sense of organizational belonging.

Taking advantage of the scales applied on our study, to measure empowering leadership, job crafting and organizational belonging, we would also like to evaluate if job crafting might positively mediate the impact of empowering leadership and the employees' sense of organizational belonging.

H4: Job crafting mediates the impact between empowering leadership and employees' sense of organizational belonging.

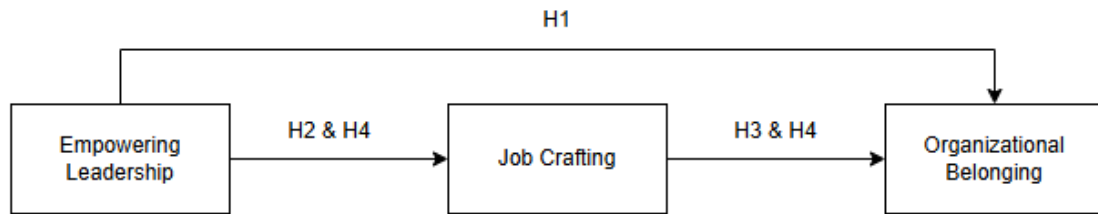


Figure 1 - Study 1 conceptual model and hypothesis

3.2. Study 2 Model

As stated before, we developed a second study based on a set of different leadership behavioural types, increasing the depth of our work in terms of the leadership impact on organizational belonging.

Research shows that leadership is an immense discipline, which can be assessed from multiple scales, and that can be organized by several standpoints. Knowing that this dense subject has a major impact on employees' health, perception of self and their work, as well as the organizations to which they work for, we felt that another study could arise based on multiple leadership behaviour types.

From a theoretical framework, the Social Identity Theory of Leadership (Hogg, 2001) suggests that effective leaders foster organizational belonging by embodying and reinforcing the values and norms of the group, thereby enabling employees to internalize the organizational identity as part of their self-concept. Leaders who successfully represent the collective identity create a sense of “we-ness,” which strengthens employees' perception of being integral members of the organization. Complementarily, the Leader–Member Exchange (LMX) theory (Graen & Uhl-Bien, 1995) emphasizes the importance of the quality of the dyadic relationship between leaders and followers. High-quality exchanges, characterized by trust, respect, and mutual support, enhance employees' feelings of being valued and included which in turn deepens their sense of belonging. Together, these perspectives highlight that leadership behavioural types exert their influence on organizational belonging not only by shaping collective identity but also by fostering high-quality interpersonal relationships within the organization. Negative or ineffective leadership behaviours can actively hinder employees' sense of belonging within the organization. When leaders act in ways that are inconsistent with group values, emphasize individual interests over collective goals, or fail to cultivate supportive relationships,

employees may struggle to identify with the organization and perceive themselves as outsiders. Moreover, weak or transactional interactions between leaders and followers can foster feelings of neglect or exclusion, thereby eroding the psychological foundation upon which belonging is built.

It is also important to stress that leaders do not display only one leadership behavioural type but instead have a predominant type. This reinforces the value added to this study by the model being shaped to incorporate multiple leadership behavioural types.

Another motivation to the design of this study is related to the context of IT workers and their remote work practices. Without the physical presence at the organizations' offices, employees are constantly left with little interaction with the organization beside their day-to-day work management. With IT being an unusually flexible context, teams are typically assembled for each project and frequently include employees that do not share the same employer, working on the same project-client but from different organizations. In consequence, being mostly in contact with team colleagues, the leader is commonly the most important connection employees' have to the organization, representing the organization to the worker (Wróbel, 2023).

This complex background gives IT workers and its leaders an extremely demanding challenge: leaders need to maintain regular contact with the workers in a way that fosters the employee connection to the organization. Thus, is it possible that leadership behavioural types considered negative or more elementary, such as aversive or directive, can negatively impact the employees organizational belonging?

H5a: Aversive leadership negatively impacts employees' sense of organizational belonging.

H5b: Directive leadership negatively impacts employees' sense of organizational belonging.

On the contrary direction, could it be that more positive, employee centred, leadership behavioural types positively impact the employees organizational belonging?

H5c: Transactional leadership positively impacts employees' sense of organizational belonging.

H5d: Transformational leadership positively impacts employees' sense of organizational belonging.

H5e: Empowering leadership positively impacts employees' sense of organizational belonging.

Aiming to take advantage of the constructs available in our study, we also examine the impact of this set of 5 leadership behavioural types on the presence of job crafting. This analysis could reveal some unexpected patterns, not yet explored in the literature.

H6a: Aversive leadership negatively impacts the presence of job crafting.

H6b: Directive leadership negatively impacts the presence of job crafting.

H6c: Transactional leadership positively impacts the presence of job crafting.

H6d: Transformational leadership positively impacts the presence of job crafting.

H6e: Empowering leadership positively impacts the presence of job crafting.

The same way, we assessed the mediating role of job crafting in the leadership-belonging relationship for each leadership behavioural type.

H7a: Job crafting mediates the impact between aversive leadership and employees' sense of organizational belonging.

H7b: Job crafting mediates the impact between directive leadership and employees' sense of organizational belonging.

H7c: Job crafting mediates the impact between transactional leadership and employees' sense of organizational belonging.

H7d: Job crafting mediates the impact between transformational leadership and employees' sense of organizational belonging.

H7e: Job crafting mediates the impact between empowering leadership and employees' sense of organizational belonging.

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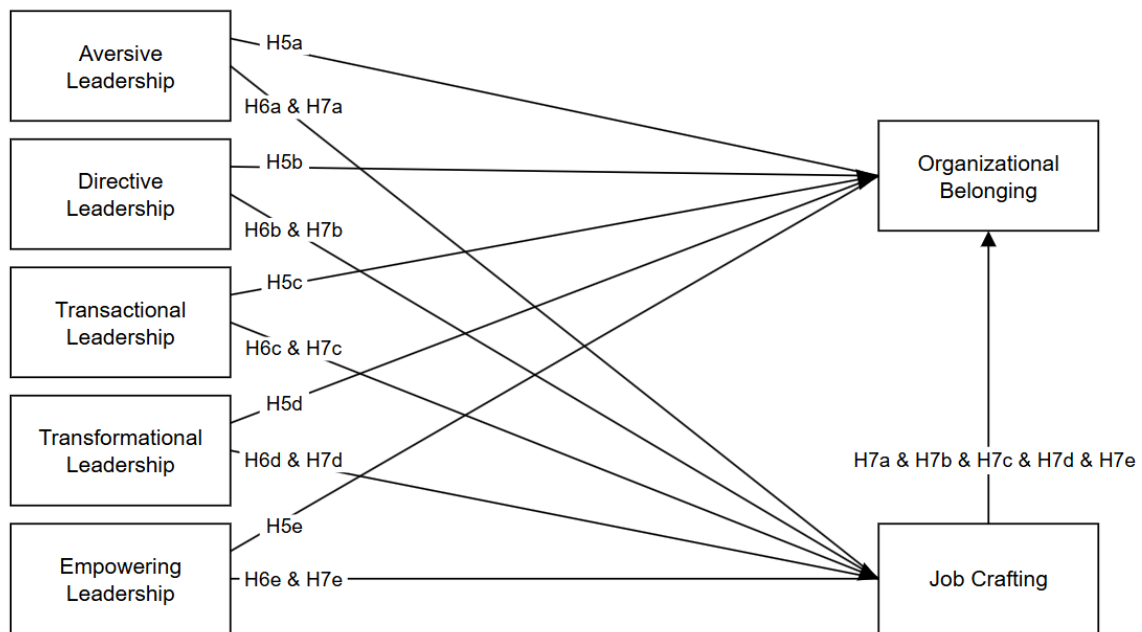


Figure 2 – Study 2 conceptual model and hypothesis

4. Methodology

As an empirical investigation, this study relies on quantitative data collected via a two-wave online survey, administered at two time points approximately two weeks apart, as part of a time-lagged research design. The survey was distributed through social media platforms (such as LinkedIn and Facebook) and direct messaging, while collected data was connected by a distinct secret code.

The target of our studies are workers of IT companies, operating in Portugal, who may or may not be on remote work. The questionnaire began with a section on the social and professional profile of respondents to ensure compliance with the study's target population.

This research adopts a quantitative survey design, conducted in two sequential waves, as stated before. While not longitudinal in the traditional sense of tracking change over time, the divided structure was strategically implemented to mitigate respondents' fatigue and reduce the risk of automatic or superficial responses. By distributing the questionnaire across two moments, the study aimed to preserve response quality and ensure thoughtful engagement with the items. This approach is particularly relevant in workplace studies, where lengthy instruments may compromise data reliability if completed in a single sitting.

To support participation in the second wave of the study, an optional reminder mechanism was implemented in parallel with the main survey. Participants were invited to either save the direct link to the wave 2 questionnaire or provide their email address through a separate form titled "*Lembrete para 2ª parte do questionário*". This measure aimed to reduce attrition between waves without compromising data protection or confidentiality.

4.1. Measures

In the first wave of the questionnaire, we administered validated scales to assess empowering leadership behavioural type, job crafting and organizational belonging, as well as to collect the social-professional profile of the respondents. In the second wave of the questionnaire, we applied the remaining leadership behavioural types comprised in the selected scale: aversive, directive, transactional and transformational leaderships. The questionnaire outline can be seen in Table 2 – Questionnaire detail according to selected constructs, and the full version of the questionnaire is available on appendices A and B.

Since the questionnaire was intended for participants in Portugal, it was formulated in Portuguese to avoid misunderstandings or lack of responses due to limited English proficiency. For the leadership behavioural types scale, we used the validated Portuguese translation by T. S. Esteves (2016). For job crafting and organizational belonging, we performed our own translation from English to Portuguese. The accuracy of these translations was verified using the retro-translation verification method, with translation and back-translation carried out by two different academics, both proficient in English and Portuguese.

Questionnaire Structure

	Construct	Dimensions	Count	Reference
Phase 1	Socio-Professional Profile	(a) Employment confirmation	10	N. A.
		(b) Social characterization		
		(c) Professional characterization		
	Job Crafting	(a) Task crafting	15	Slemp & Vella-Brodrick (2013)
		(b) Cognitive crafting		
		(c) Relational crafting		
Organizational Belonging	(a) Acceptance	18	Blau et al. (2023)	
	(b) Diversity Valued			
	(c) Safety			
	(d) Be Myself			
	(e) Connection			
Empowering Leadership	(a) Encouraging independent action	22	Pearce & Sims (2002)	
	(b) Encouraging opportunity thinking			
	(c) Encouraging teamwork			
	(d) Encouraging self-development			
	(e) Participative goal setting			
	(f) Encouraging self-reward			
Phase 1 Total			65	
Phase 2	Aversive Leadership	(a) Engaging in intimidation	6	Pearce & Sims (2002)
		(b) Dispensing reprimands		
	Directive Leadership	(a) Issuing instructions commands	6	
		(b) Assigning goals		
	Transactional Leadership	(a) Providing personal reward	16	
		(b) Providing material rewards		
(c) Managing by exception (active)				
(d) Managing by exception (passive)				

Transformational Leadership	(a) Providing vision	20
	(b) Expressing idealism	
	(c) Using inspirational communication	
	(d) Having high performance expectations	
	(e) Challenging the status quo	
	(f) Providing intellectual stimulation	
Phase 2 Total		48

Table 2 – Questionnaire detail according to selected constructs

To assess the internal consistency of the selected scales and respective subdimensions used in this study, Cronbach’s alpha coefficients were calculated. Most subdimensions demonstrated acceptable to excellent reliability ($\alpha > 0.70$).

A few subdimensions showed low coefficients, however for the organizational belonging subdimensions “Safety” and “Connection”, a low alpha value should not be interpreted as poor reliability, as these subdimensions consist of only two items. In such cases, the inter-item Pearson correlation coefficient (r) and its significance provide a more appropriate reliability indicator. For the organizational belonging subdimension “Safety” ($r = 0.13$, p -value = 0.08), the correlation is weak and not statistically significant, indicating limited reliability. In contrast, “Connection” ($r = 0.68$, p -value < 0.001) shows a strong and statistically significant correlation, supporting the reliability of this subdimension despite the low item count.

However, the transformational leadership subdimension “Expressing Idealism” ($\alpha = 0.15$) includes three items, and therefore Cronbach’s alpha is the appropriate reliability measure. Such a low coefficient suggests poor internal consistency and may affect the interpretation of results related to this construct.

Despite these limitations, all subdimensions were retained for statistical analysis to preserve the theoretical integrity of the constructs and ensure comparability with existing literature. These reliability concerns are acknowledged and discussed in the limitations section.

Questionnaire Structure

	Construct	Dimensions	Cronbach’s alpha
Phase 1	Socio-Professional Profile	(a) Employment confirmation	-
		(b) Social characterization	-
		(c) Professional characterization	-

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Job Crafting	(a) Task crafting	0,74	
	(b) Cognitive crafting	0,85	
	(c) Relational crafting	0,73	
Organizational Belonging	(a) Acceptance	0,87	
	(b) Diversity Valued	0,52	
	(c) Safety	0,21	
	(d) Be Myself	0,89	
	(e) Connection	0,81	
Empowering Leadership	(a) Encouraging independent action	0,84	
	(b) Encouraging opportunity thinking	0,89	
	(c) Encouraging teamwork	0,74	
	(d) Encouraging self-development	0,96	
	(e) Participative goal setting	0,96	
	(f) Encouraging self-reward	0,89	
Phase 2	Aversive Leadership	(a) Engaging in intimidation	0,87
		(b) Dispensing reprimands	0,75
Directive Leadership	(a) Issuing instructions commands	0,79	
	(b) Assigning goals	0,90	
Transactional Leadership	(a) Providing personal reward	0,91	
	(b) Providing material rewards	0,91	
	(c) Managing by exception (active)	0,73	
	(d) Managing by exception (passive)	0,77	
Transformational Leadership	(a) Providing vision	0,89	
	(b) Expressing idealism	0,15	
	(c) Using inspirational communication	0,77	
	(d) Having high performance expectations	0,47	
	(e) Challenging the status quo	0,85	
	(f) Providing intellectual stimulation	0,86	

Table 3 – Cronbach's alpha coefficients for selected scales

4.1.1. Questionnaire – Wave 1

The questionnaire begins with a set of questions designed to collect social and professional profiling of the participant, serving as a filter to exclude participants who did not meet the study's criteria. Specifically, participants were required to confirm that their current employment sector was IT and that their primary work location was in Portugal; otherwise, they were excluded from the survey, and no further questions were presented.

After this initial confirmation, socio-demographic data were collected, including age, gender and education level. Professional information was then gathered, such as company size, work arrangement (remote, on-site or hybrid), years of experience in IT, duration of the current leader-employee connection, and frequency of interaction. These variables were included to explore potential patterns in subsequent statistical analysis.

To measure leadership behavioural types, we used a standardized questionnaire adapted from Pearce & Sims (2002). The full instrument assesses aversive, directive, transactional, transformational and empowering leadership, however, in the first wave of the survey, only the section on empowering leadership was administered. This section consists of 22 validated items organized into six representative behaviours: (a) encourage self-reward; (b) encourage teamwork; (c) participative goal setting; (d) encourage independent action; (e) encourage opportunity thinking; (f) encourage self-development. Responses were recorded on a five-point Likert-type scale: 1 (definitely not true); 2 (not true); 3 (neither true nor untrue); 4 (true); and 5 (definitely true).

For job crafting, two validated scales were considered: a 21-item scale by Tims et al. (2012) and a 15-item refinement by Slemp & Vella-Brodrick (2013). The latter was selected because it addresses limitations of the original scale. The author defends that the original 21-item scale fails to clarify if some responses come from employees changed behaviour or employees changed cognition. Also, the original scale had inconsistent Likert-type response scales throughout the questionnaire, making it more challenging for the participants to answer truthfully. The 15-item scale uses a six-point Likert-type scale ranging from 1 (hardly ever) to 6 (very often) and measures three dimensions: (a) task crafting (modifying job tasks); (b) cognitive crafting (changing perception of work); and (c) relational crafting (altering social interactions at work).

To provide context on available scales for organizational belonging it is important to note that the General Belongingness Scale (GBS) was the first developed instrument. This was elaborated to provide a tool to assess both the sense of achieved belonging and the lack of not belonging in a balanced way (Malone et al., 2012). This approach came from the fact that previous measuring instruments of belongingness were built predominantly on negative-worded items (Malone et al., 2012). In consequence, the results could vary depending on the interpretation of an item, not being possible to identify if the response reported a sense of belonging because the individual felt included or just didn't feel excluded. Nonetheless,

these early methods are not adequate to measure context specific belongingness, as different contexts have specific characteristics that can only be measured if the scale used have been explicitly developed and validated for that purpose (Jena & Pradhan, 2018). Research continued on workplace belongingness, employee belongingness, and organizational connectedness scales, based on what a new scale on organizational belonging was proposed by Blau et al. (2023).

In consequence, organizational belonging was assessed using this new 16-item scale by Blau et al. (2023) specifically designed for modern organizational context. All items in this instrument are positively worded and rated on a five-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). The comprises five dimensions: (a) acceptance; (b) diversity valued; (c) safety; (d) be myself; and (e) connection.

At the end of this wave, participants were instructed to create a unique identification code to enable matching responses across both waves while preserving anonymity. The code was generated using the following rule: (a) the first letter of the participant's first name (uppercase); (b) the first letter of their last name (uppercase); and (c) the last three digits of their tax identification number (NIF). This approach ensured accurate linkage of responses without collecting personally identifiable information.

4.1.1. Questionnaire – Wave 2

In the second wave of the questionnaire, the survey included only the remaining leadership behavioural types from the Pearce & Sims (2002) scale previously introduced.

For aversive leadership the scale comprises two dimensions: (a) intimidation and (b) reprimand. For directive leadership, the scale considers two dimensions: (a) assigned goals and (b) instruction and command. Transactional leadership is assessed through four dimensions: (a) material reward; (b) personal reward; (c) management by exception (active); and (d) management by exception (passive). Finally, transformational leadership is measured across six dimensions: (a) performance expectations; (b) challenge to status quo; (c) vision; (d) idealism; (e) inspirational communication; and (f) intellectual stimulation.

At the beginning of this wave, participants were instructed to recreate their personal identification code using the same rule applied in wave 1: (a) the first letter of the participant's first name (uppercase); (b) the first letter of their last name (uppercase); and (c)

the last three digits of their tax identification number (NIF). This procedure ensured accurate linkage of responses across both waves while maintaining participants anonymity.

4.2. Ethical Considerations

This study complies with the General Data Protection Regulation (GDPR) and institutional ethical standards. At the beginning of the questionnaire, participants were presented with an introduction explaining the purpose of the survey, the voluntary nature of the contribution, and the guarantee of anonymity. The introduction also clarified that responses would be used exclusively for statistical purposes and treated in aggregate form.

Explicit consent was obtained through a mandatory question, where participants could authorise or decline the collection and processing of their responses for the purposes described (*'Autorizo a recolha e tratamento das minhas respostas para os fins acima descritos'* / *'Não autorizo a recolha e tratamento das minhas respostas para os fins acima descritos'*). It is important to stress, no personally identifiable information was collected, and the unique identification code used to link both waves of the survey was generated by autonomously by participants following a predefined rule that did not allow for direct identification. All data were stored securely and used solely for academic purposes.

The reminder mechanism implemented alongside the main survey fully complied with data protection regulations and ethical standards. Participants provided explicit consent regarding the purpose and processing of their email contact information. The email addresses were used solely for sending the reminder and were not linked to survey responses in any way, thereby preserving participant anonymity throughout the study.

4.3. Sample and procedure

Participants were employees of IT companies whose primary work location was in Portugal, regardless of their working arrangement including both remote and on-site work. Participants were recruited using a non-probability sampling strategy, primarily through convenience sampling. Initial outreach was conducted via social media posts on platforms such as LinkedIn and Facebook, as well as direct messaging through these same platforms as well as WhatsApp and Microsoft Teams. In addition to this, a snowball sampling element was introduced, as some participants shared the survey within their own professional

networks, leading to further recruitment. This combined approach facilitated access to a more diverse pool of IT professionals working in Portugal. To further expand the sample, direct email invitations were sent to a range of Portuguese companies, of various dimensions, however no responses were obtained from these contacts.

As previously mentioned, the questionnaire began with a mandatory confirmation of voluntary participation and consent for data collection and processing, in compliance with anonymity and data protection regulations.

Respondents from wave 1 were a total of 256, where 3 did not accept the terms and conditions presented, 31 were excluded for not working on an IT company and 9 were excluded for not having their main working site in Portugal, resulting on a total of 213 valid responses. From wave 2 there were a total of 215 responses, where 2 were excluded for not accepting the terms and conditions of the study. There were no other excluding parameters on this wave. In total, merging both waves with code linkage there were a total of 293 responses. However, due to code mismatch, the total number of matched responses was only 121. In total, 92 responses were lost from wave 1, and 94 were lost from wave 2, which represents an attrition rate of 43%, of unmatched responses. This level of attrition may reflect challenges in longitudinal participant retention and could influence the generalizability of the findings. We also believe the implemented reminder mechanism had a contrary effect, augmenting the attrition rate instead of the expected effect.

The final sample includes 121 participants, 69% male and 31% female. The prevalent age is on the range of 35 to 44 years old with 44%, followed by 36% on the range of 25 to 34 years old, 15% on the range of 45 to 54, 3% with more than 55 and 2% on the range of 18 to 24 years old. Most participants are high qualified with 59% having a degree and 24% with a master's degree, while 5% have a higher professional technical course (CTESP), another 5% have high school grade, 1% have a doctorate degree and 6% mention they have none of the above.

As for the participants companies' landscape, most participants work in companies with more than 500 employees (69%), followed by companies with between 201 and 500 employees (15%), then companies with between 51 and 200 employees (9%), ending with 4% of participants working on companies with less than 50 employees and 3% on companies with less than 10 employees. In terms of remote versus presential work arrangements, half

of participants work full remote, while 33% go to office once or twice a week, 12% go to office up to 4 times a week and only 4% work full on-site.

In terms of professional experience 50% have more than 10 years long practice, 22% have from 7 to 10 years' experience, 16% have up to 7 years and 12% have 3 years or less. On current leadership relation 46% have had their current leader from 1 to 3 years time, 19% from 4 to 6 years, 15% bellow a year, 12% for more than 7 years and 9% have had their current leader for less than 3 months. In terms of leadership interaction, 47% participants report interacting with their leader daily, 33% a few times a week, 9% once a week and 11% less than once a week.

The following section describes the statistical techniques applied to analyse the collected data.

4.4. Statistical Analysis

For statistical analysis, due to our studies landscape, we followed a confirmatory approach, rather than an exploratory methodology. Structural Equation Modelling (SEM) was used as the primary analytical method since it is suitable to test complex relationships between multiple variables simultaneously. Unlike exploratory techniques, such as linear regression, SEM's confirmatory nature aligns with the study's hypothesis design. It allows the analysis of both direct and indirect effects, which is essential for testing mediation, as well as, to estimate multiple dependent and independent variables simultaneously.

So, the confirmatory study process involves specifying relationships between constructs according to theoretical foundations and subsequently testing the derived hypotheses for statistical significance. This approach is particularly suitable for psychological and organizational research, such as our empirical work.

The structural equation model includes both observed variables (the survey items) and latent variables, which represent the broader psychological or organizational concepts, our constructs. Although validated scales were used to measure the constructs, these are considered as latent variables within the model. Latent constructs are inferred from multiple observed indicators and allow for a more accurate representation of complex phenomena by accounting for measurement error and capturing underlying dimensions of behaviour and perception.

This statistic technique has another advantage: it accounts for measurement error. Measurement error refers to the difference between the true value of a construct and the value we observe on our sample. In survey-based research, this error can come from misinterpretation of questions, response bias, imperfect scale reliability or even external distractions during the survey completion. So, instead of assuming that each item perfectly reflects the construct, as in linear regression, SEM estimates and adjusts for the error.

Structural equation modelling improves analytical accuracy by explicitly accounting for measurement error in the observed variables. This allows for a more precise estimation of the relationships between latent constructs, ensuring that the results reflect the true underlying patterns rather than noise introduced by imperfect measurement.

To test mediation effects, we employed non-parametric bootstrapping with bias-corrected (BC) confidence intervals in the SEM framework. Bootstrapping repeatedly resamples the original dataset with replacement (1,000 resamples in our case), re-estimating the model on each draw to form an empirical sampling distribution for every parameter. Since an indirect effect is the product of paths ($a \times b$), its sampling distribution is typically non-normal, rendering normal-theory tests inadequate (e.g. Sobel). Also, BC bootstrapping adjusts for small-sample bias and asymmetry in that distribution, providing more accurate confidence intervals and p-values for both direct and indirect effects. This procedure yields inferences that are robust to non-normality and is the recommended approach for mediation in SEM.

Mediation is classified as partial when the indirect effect is significant and the direct effect remains significant after including the mediator. It is classified as full when the direct effect becomes non-significant while the indirect effect is significant.

In Study 1, SEM was applied to test the mediating role of job crafting between empowering leadership and organizational belonging. This allowed us to examine both the direct effect of empowering leadership on organizational belonging and the indirect effect through job crafting. On a broader scope, Study 2 focuses on assessing the direct effect of the five leadership behavioural types (aversive, directive, transactional, transformational, and empowering) on organizational belonging.

The model fit was evaluated using standard indices that confirm the general model fit, each capturing a different aspect of fit. The chi-square ratio (CMIN/df) for studies 1 and 2 (correspondingly 1.52 and 1.57) were both below the recommended threshold of 2,

indicating excellent fit. The RMSEA values for studies 1 and 2 (equally 0.07) were both under the 0.08 cutoff, suggesting reasonable fit. The Incremental Fit Index (IFI) was 0.94 for study 1 indicating good fit, and 0.90 for study 2 suggesting an acceptable model. The Comparative Fit Index (CFI) was 0.94 for study 1 and 0.90 for study 2, both meeting the conventional 0.90 standard. It is worth noting that the lower TLI and CFI values in study 2 might be due to greater model complexity and small sample size.

Fit Index	Fit Threshold	Models		Interpretation
		Study 1	Study 2	
DF	-	168	539	Study 2 is more complex.
CMIN/df	< 2 (excellent)	1.52	1.57	Both indicate excellent fit.
RMSEA	< 0.08 (reasonable)	0.07	0.07	Both within acceptable range.
IFI	> 0.90 (acceptable)	0.94	0.90	Study 1 good;
	> 0.95 (good)			Study 2 acceptable.
CFI	> 0.9 (good)	0.94	0.90	Study 1 good; Study 2 acceptable.

Table 4 – Model fit standard indices

These are key indices used in both structural equation modelling (SEM) and confirmatory factor analysis (CFA) to evaluate how well a hypothesized model fits the observed data. The chi-square statistic tests the null hypothesis that the model fits the data perfectly; however, it is sensible to sample size. So, we used CMIN/df (chi-square/degrees of freedom) ratio in detriment of the raw chi-square, making it more robust as it adjusts for model complexity (degrees of freedom). Root mean square error of approximation (RMSEA) estimates how well the model would fit the population covariance matrix, not just the sample, accounting for model complexity and penalizing overfitting. RMSEA is widely used because it adjusts for both sample size and model complexity. The Incremental Fit Index (IFI) compares our model to a baseline model, assessing improvement in fit while accounting for model complexity. It is less sensitive to sample size and complements other fit indices in evaluating model adequacy. Comparative fit index (CFI) also compares the proposed model to a baseline (independent) model where variables are assumed not correlated, and the measures improvement over the worst-case scenario. CFI is less sensitive to sample size than the chi-square and is recommended for SEM reporting. In conclusion, both studies 1 and 2 present good results on the three indicators, revealing an overall good fit of the two models.

5. Results

This section presents the results of the structural equation modelling (SEM) analyses conducted to test the proposed hypothesis. For each relationship, the regression weights, or path, coefficient β is reported, which represents the strength and direction of the effect between variables. A positive estimate indicates that as the predictor (independent variable) increases, the outcome (dependent variable) also increases. Whereas a negative estimate indicates an inverse relationship: as the predictor the outcome decreases.

Statistical significance was assessed using p-values, with effects considered significant as $p < 0.05$ for two-tailed significance. Given the directional nature of the hypotheses, one-tailed significance tests were applied, meaning the results were evaluated based on whether the observed effect occurred in the hypothesized direction. In addition to significance, the magnitude of β provides insight into the practical relevance of the relationship assessed.

5.1. Study 1 Results

Before testing for hypotheses support, descriptive statistics and bivariate correlation were examined to explore the relationship between the main constructs of study 1. This primary analysis provide insight into the strength and direction of associations between empowering leadership (EL), job crafting (JC) and organizational belonging (OB), helping establish the foundation for the subsequent hypothesis testing.

Constructs	M	SD	1	2	3
1. Organizational Belonging	4.21	0.56	-		
2. Job Crafting	3.75	0.56	0.55**	-	
3. Empowering Leadership	3.82	0.77	0.69**	0.47**	-

* Correlation is significant at the 0.05 level (1-tailed)

** Correlation is significant at the 0.01 level (1-tailed)

Table 5 – Study 1 means, standard deviations and Pearson correlations of the model variables

The results reveal that EL ($M = 3.82$) shows a strong and positive correlation with OB ($r = 0.69$, p sig. < 0.01), suggesting that when employees perceive leaders as empowering, they are more likely to feel a stronger sense of belonging within the organization. Additionally,

EL is positively related to job crafting ($r = 0.47, p \text{ sig.} < 0.01$), indicating that this leadership style also encourages employees to proactively shape and adapt their work roles. Organizational belonging itself is positively associated with job crafting ($r = 0.55, p \text{ sig.} < 0.01$). These starting results may imply that employees who feel integrated and valued in their organizations are more inclined to engage in JC behaviours, such as adjusting tasks or seeking new challenges. Overall, these findings support notion that EL is well related with OB and with JC, and that OB is also well related with fostering proactive work behaviours (JC).

When analysing the regression weights of the study variables in confirmatory analysis, it was possible to see that the analysis results of Study 1 provided strong support for all four hypotheses. Empowering leadership demonstrated a significant positive effect on employees' sense of organizational belonging ($\beta = 0.39, p \text{ sig.} < 0.01$), supporting *H1*. Similarly, supporting *H2*, empowering leadership significantly increased the presence of job crafting behaviours ($\beta = 0.31, p \text{ sig.} < 0.01$). Job crafting also exhibited a significant positive impact on organizational belonging ($\beta = 0.26, p \text{ sig.} < 0.01$), this way supporting *H3*.

H	Path	Raw		Interpretation
		Coefficient	p-value	
<i>H1</i>	EmpL → OB	0.39	< 0.01	Strong, positive and significant
<i>H2</i>	EmpL → JC	0.31	< 0.01	Strong, positive and significant
<i>H3</i>	JC → OB	0.26	< 0.01	Strong, positive and significant

Table 6 – Study 1 raw estimates for direct paths

Furthermore, the mediation analysis confirmed that the job crafting partially mediated the relationship between empowering leadership and organizational belonging, sustaining *H4*. The direct effect of empowering leadership on belonging is strong and significant ($\beta = 0.39, p \text{ sig.} < 0.01$). The indirect effect through job crafting is weak but significant, indicating mediation is present ($\beta = 0.13, p \text{ sig.} < 0.01$). The total effect is strong, positive and significant ($\beta = 0.72, p \text{ sig.} < 0.01$).

Effect	Path	Standardized		Interpretation
		Coefficient	p-value	
Direct (c')	EmpL → OB	0.60	< 0.01	Strong, positive and significant
Indirect (a * b)	EmpL → JC → OB	0.13	< 0.01	Strong, significant positive indirect effect (mediation present)

Total ($c = c' + a*b$)	EmpL → OB (overall)	0.72	< 0.01	Strong, significant positive total effect (partial mediation)
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Table 7 – Study 1 standardized coefficients for mediation evaluation

The following diagram (figure 3) shows the SEM analysis results for Study 1 with standardized path coefficients to show comparable strength and direction of the relationship. Latent variables empowering leadership, organizational belonging and job crafting are shown in ovals, observed variables and *p*-values are also present.

When considering the path standardized effects as shown in the diagrams below, empowering leadership effect on organizational belonging is strong, positive and significant ($\beta = 0.60, p \text{ sig. } < 0.01$). Empowering leadership effect on job crafting is strong, positive and significant ($\beta = 0.48, p \text{ sig. } < 0.01$). Job crafting effect on organizational belonging is moderate, positive and significant ($\beta = 0.26, p \text{ sig. } < 0.01$). Empowering leadership indirect effect on organizational belonging via job crafting mediation is weak but significant ($\beta = 0.13, p \text{ sig. } < 0.01$), as presented before.

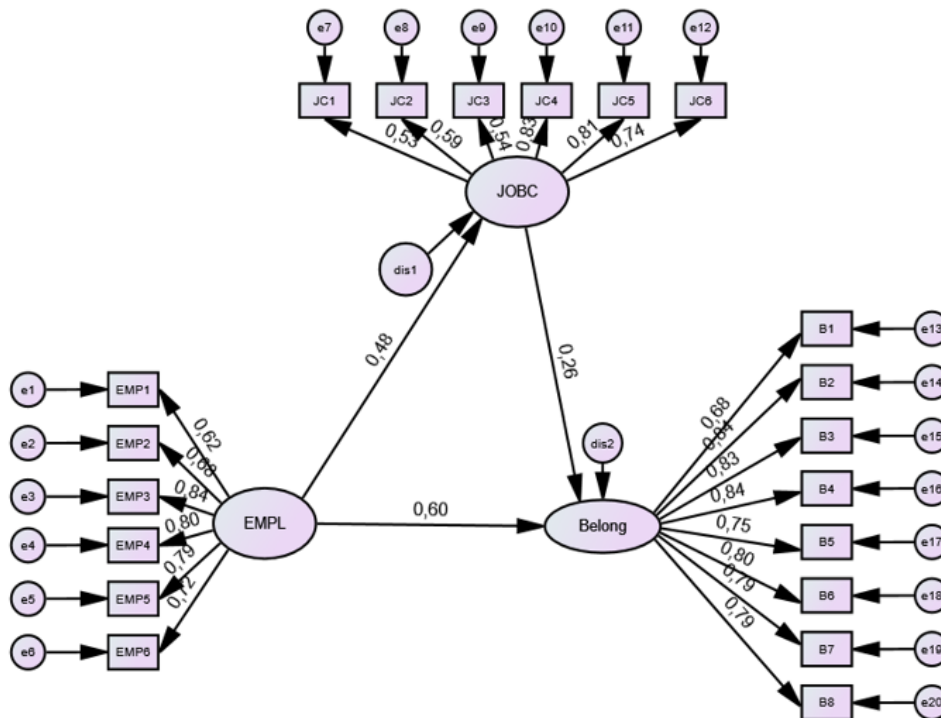


Figure 3 – AMOS SEM diagram for Study 1

Study 1 findings suggest that empowering leadership not only directly enhances employees' sense of belonging but also indirectly strengthens it through the promotion of job crafting behaviours.

5.2. Study 2 Results

Study 2 extended the analysis to include five leadership behavioural types. Prior to testing the hypotheses, descriptive statistics and bivariate correlations were examined to assess the relationship between the key constructs included in study 2. Table 8 presents the means, standard deviations and Pearson correlation coefficients for the five leadership behavioural types, job crafting and organizational belonging.

Constructs	M	SD	1	2	3	4	5	6	7
1. Organizational Belonging	4.21	0.59	-						
2. Job Crafting	3.71	0.59	0.53**	-					
3. Aversive Leadership	2.37	0.71	-0.41**	-0.15	-				
4. Directive Leadership	3.24	0.75	0.24**	0.10	0.06	-			
5. Transactional Leadership	2.91	0.44	-0.13	-0.10	0.28**	0.34**	-		
6. Transformational Leadership	3.74	0.59	0.63**	0.47**	-0.20*	0.50**	0.19*	-	
7. Empowering Leadership	3.82	0.85	0.70**	0.47**	-0.35**	0.42**	0.10	0.76**	-

* Correlation is significant at the 0.05 level (1-tailed)

** Correlation is significant at the 0.01 level (1-tailed)

Table 8 – Study 2 means, standard deviations and Pearson correlations of the model variables

The descriptive results indicate that OB (M = 4.21) obtained the highest mean score, showing that participants generally perceive a strong sense of belonging to their organizations. In contrast, AL (M = 2.37) had the lowest score, suggesting that this style of leadership is less frequently perceived. JC (M = 3.71) presented a moderate level, reflecting a balanced tendency of employees to proactively redesign their work. In terms of correlations, OB showed strong and positive associations with EL ($r = .70$) and TL ($r = .63$), as well as with JC ($r = .53$). This highlights the central role of belonging as a construct connected both to leadership styles that are developmental and participatory in nature, and to employees' proactive behaviours at work. EL and TL also correlated positively and significantly with JC ($r = .47$ in both cases), reinforcing the idea that positive leadership behaviours foster employees' willingness to take initiative and shape their tasks. Conversely, AL correlated negatively with OB ($r = -.41$), EL ($r = -.35$), and TL ($r = -.20$), pointing to its detrimental impact on employees' sense of connection and on perceptions of constructive leadership.

DL showed weaker and more mixed results, being positively related to OB and TL but not significantly linked to JC. TL was primarily associated with directive and aversive styles but unrelated to OB or JC. Overall, the results suggest that positive and empowering leadership styles strengthen employees' sense of belonging and their job crafting behaviours, while aversive leadership undermines these organizational outcomes.

When analysing the regression weights of the study variables in confirmatory analysis, results revealed that AL had a significant negative effect on OB ($\beta = -0.18, p \text{ sig. } < 0.01$), confirming the hypothesized negative relationship *H5a*. For directive, transactional, and transformational leaderships (*H5b*, *H5c*, and *H5d*), no significant effects on OB were observed ($p \text{ no-sig. } > 0.05$), indicating that these leadership behavioural types did not meaningfully influence employees' sense of belonging in this sample. Finally, as theorised in *H5e*, EL maintains a significant positive effect on OB ($\beta = 0.20, p \text{ sig. } < 0.05$), reinforcing the findings from Study 1.

The results do not support the direct effect of the different leadership behavioural types on the presence of job crafting (*H6a*, *H6b*, *H6c*, *H6d*), except for the EL (*H6e*). The EL - JC path remains significant on study 2, consistent with study 1. As for AL, the non-significant coefficient on AL - JC path (*H6a*) invalidates the presence of mediation through job crafting (*H7a*). Therefore, on mediation analysis it is expected only a direct effect on AL - OB (*H5a*), with no mediation present.

<i>H</i>	Path	Raw		Interpretation
		Coefficient	<i>p</i> -value	
<i>Aversive Leadership</i>				
<i>H5a</i>	AverL → OB	-0.18	< 0.01	Moderate, negative and significant
<i>H6a</i>	AverL → JC	0.07	0.19	Very weak, opposite but non-significant
<i>Directive Leadership</i>				
<i>H5b</i>	DirecL → OB	-0.06	0.14	Weak, negative and non-significant
<i>H6b</i>	DirecL → JC	-0.12	0.06	Weak/moderate, negative and non-significant
<i>Transactional Leadership</i>				
<i>H5c</i>	TransC → OB	-0.003	0.48	Null/Opposite but non-significant
<i>H6c</i>	TransC → JC	-0.05	0.31	Very weak and opposite but non-significant
<i>Transformational Leadership</i>				
<i>H5d</i>	TransF → OB	0.13	0.10	Weak/moderate, positive but non-significant
<i>H6d</i>	TransF → JC	0.15	0.14	Weak/moderate, positive but non-significant
<i>Empowering Leadership</i>				
<i>H5e</i>	EmpL → OB	0.20	0.01	Moderate, positive and significant

<i>H6e</i>	EmpL → JC	0.30	0.01	Strong, positive and significant
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Table 9 – Study 2 raw estimates for direct paths

On mediation analysis in leadership – organizational belonging path through job crafting results suggest mediation is present only in EL, sustaining *H7e* and confirming findings already seen in study 1. The direct effect of EL on OB is significant considering raw values ($\beta = 0.2$, $p \text{ sig. } < 0.05$). The indirect effect through JC is weak but significant, indicating mediation is present ($\beta = 0.14$, $p \text{ sig. } < 0.05$). The total effect is strong, positive and significant ($\beta = 0.5$, $p \text{ sig. } < 0.05$).

In the mediation analysis of the DL - OB via JC path (*H7b*), negative indirect effect is significant however total effect of mediation is non-significant, which is inconsistent with a full mediation pattern. This may be considered indirect-only mediation pattern (X. Zhao et al., 2010), suggesting directive negatively influences the sense of OB primarily through its negative impact on JC.

Effect	Path	Standardized		Interpretation
		Coefficient	<i>p</i> -value	
<i>Aversive Leadership (H7a)</i>				
Direct (<i>c'</i>)	AverL → OB	-0.28	0.02	Moderate, negative and significant
Indirect (<i>a * b</i>)	AverL → JC → OB	0.03	0.19	Non-significant positive indirect effect (no mediation present)
Total ($c = c' + a*b$)	AverL → OB (overall)	- 0.25	0.02	Moderate, significant negative total effect
<i>Directive Leadership (H7b)</i>				
Direct (<i>c'</i>)	DirecL → OB	-0.12	0.13	Weak, negative and non-significant
Indirect (<i>a * b</i>)	DirecL → JC → OB	- 0.07	0.02	Weak, significant negative indirect effect (mediation present)
Total ($c = c' + a*b$)	DirecL → OB (overall)	- 0.19	0.07	Moderate, negative total effect but non-significant
<i>Transactional Leadership (H7c)</i>				
Direct (<i>c'</i>)	TransC → OB	-0.01	0.48	Null/Opposite but non-significant
Indirect (<i>a * b</i>)	TransC → JC → OB	- 0.02	0.31	Opposite signed, non-significant indirect effect (no mediation present)
Total ($c = c' + a*b$)	TransC → OB (overall)	- 0.03	0.50	Opposite signed, non-significant total effect

The Impact of Leadership on the Perception of Organizational Belonging and the Mediating Effect of Job Crafting on IT Workers Working Remotely in Portugal

<i>Transformational Leadership (H7d)</i>				
Direct (c')	TransF → OB	0.22	0.21	Weak/moderate, positive but non-significant
Indirect (a * b)	TransF → JC → OB	0.07	0.15	Non-significant positive indirect effect (no mediation present)
Total (c = c' + a*b)	TransF → OB (overall)	- 0.03	0.14	Opposite signed, non-significant total effect
<i>Empowering Leadership (H7e)</i>				
Direct (c')	EmpL → OB	0.34	0.14	Moderate, positive and significant
Indirect (a * b)	EmpL → JC → OB	0.14	0.03	Weak, significant positive indirect effect (mediation present)
Total (c = c' + a*b)	EmpL → OB (overall)	0.48	0.02	Strong, significant positive total effect

Table 10 – Study 2 standardized coefficients for mediation evaluation

It is important to state that some relationships lose statistical significance when path coefficients are standardized, as seen in *H7e*, however this alteration can be justified by the overlapping nature of latent variables. With such complex model it is understandable that standardized estimates get diluted, in which case it is valid to maintain the interpretation of statistical significance of raw values.

The following diagram 4 shows the SEM analysis results for Study 2 with, as stated for Study 1, standardized path coefficients to show comparable strength and direction of the relationship. Latent variables aversive, directive, transactional, transformational and empowering leadership, organizational belonging and job crafting are shown in ovals, observed variables and p-values are also shown.

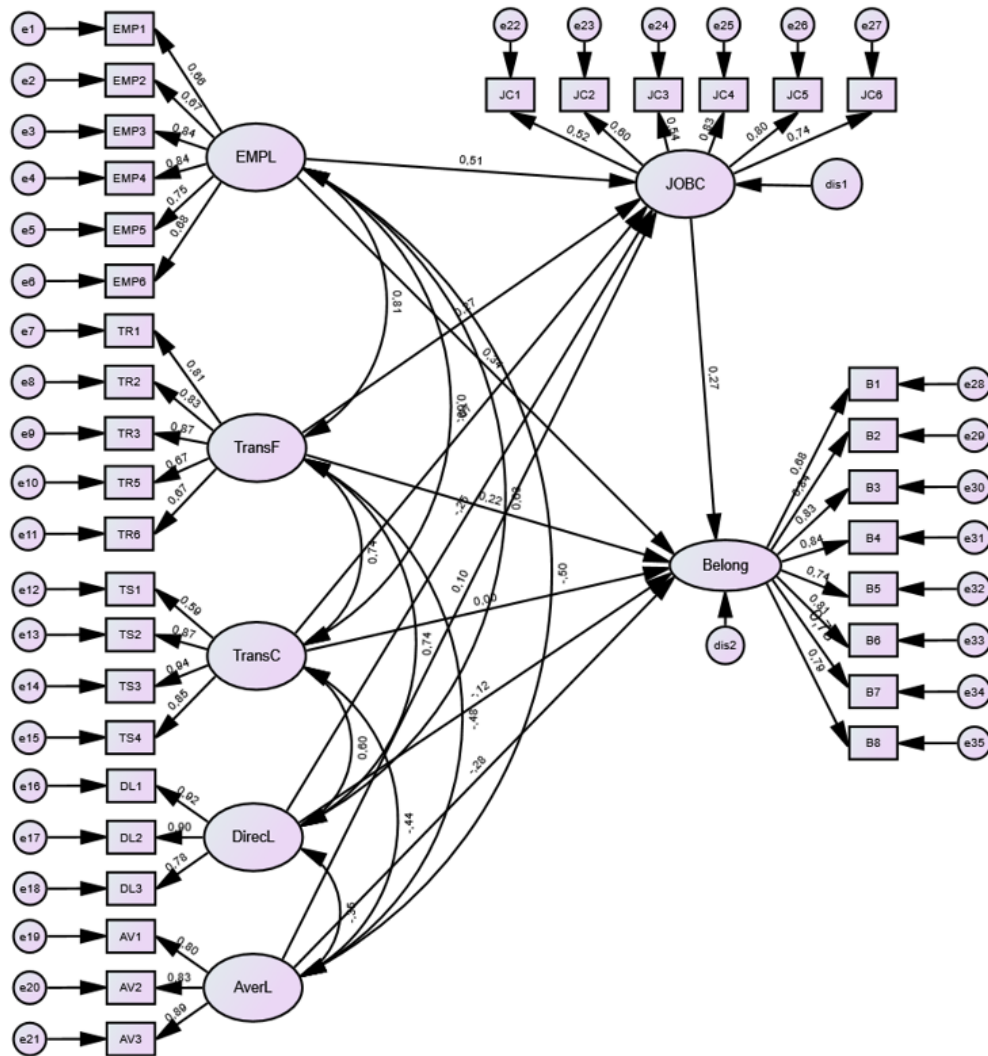


Figure 4 – AMOS SEM diagram for Study 2

Overall, study 2 results highlight the distinctive role of empowering leadership in fostering organizational belonging, while suggesting that other leadership styles have either limited or even adverse effects in this context.

6. Discussion

The purpose of this research was to examine the impact of leadership on employees' OB and the mediating role of JC, with a focus on IT professionals working in Portugal. Drawing on Self-Determination Theory (Deci & Ryan, 1985), the Job Demands-Resources model (Bakker & Demerouti, 2007), and Social Identity Theory (Hogg, 2001), we designed two complementary studies: Study 1 tested the direct and indirect effects of empowering leadership; while Study 2 broadened the analysis by incorporating a wider range of leadership behavioural types, including aversive, directive, transactional, transformational, and empowering leadership. Together, the findings make significant contributions to theory and practice, while also offering important empirical insights into the mechanisms linking leadership to employees' OB.

6.1. Empirical contributions

Empirically, this research contributes by examining leadership-belonging dynamics in a sector that remains underexplored: IT workers operating in highly flexible and often remote work arrangements. Previous studies of JC and belonging have been conducted largely in traditional organizational contexts (e.g., Tims et al., 2013; Wang et al., 2018). By studying IT professionals, we provide evidence from a population for whom the leader is often the primary representation of the organization (Wróbel, 2023). Our findings therefore may highlight how leadership behaviours carry amplified weight in shaping OB (sometimes under remote and project-based work conditions).

Furthermore, the replication of mediation effects across two studies strengthens the robustness of our findings. The consistent pattern whereby JC mediates the link between EL and OB confirms the stability of this mechanism across different model specifications. Study 2 also adds empirical clarity suggesting that not all leadership behaviours create conducive conditions for proactive work redesign leading to OB. This empirical insight brings cautions against assuming that all leadership types equally stimulate proactive employee behaviours.

Another empirical contribution lies in disentangling the relative strength of leadership types. While transformational leadership has often been associated with positive outcomes (Bass, 1999), our results suggest its effects may be diluted in complex IT work environments. Instead, empowering leadership consistently explains variance in both belonging and job

crafting. This comparative analysis across leadership styles is rarely addressed in empirical research, which tends to examine leadership types in isolation.

6.2. Theoretical contributions

This research advances leadership and organizational behaviour theory in several ways. First, by confirming that empowering leadership positively influences both job crafting and organizational belonging, our findings provide empirical support for Self-Determination Theory (Deci & Ryan, 1985). Empowering leaders enhance employees' sense of autonomy, competence, and relatedness by granting discretion, encouraging participation in decision-making, and offering developmental feedback. These practices satisfy basic psychological needs, which in turn strengthen intrinsic motivation and reinforce employees' integration into the organizational community. Our results show that these theoretical processes translate into measurable outcomes: employees report stronger organizational belonging and greater job crafting behaviours when perceiving leadership as empowering.

Second, by demonstrating the mediating role of job crafting, our study adds nuance to the Job Demands-Resources framework. Job crafting acts as a proactive behaviour that translates leadership-provided resources into concrete work adjustments and engagement with the organization. This mediation effect was consistent across both studies, suggesting that empowering leadership creates enabling conditions that employees actively use to redesign their tasks and strengthen their sense of belonging. While earlier research highlighted job crafting as an individual-level phenomenon (Tims et al., 2013), our findings underscore its role as a relational mechanism, activated by leadership behaviours that expand employees' discretion and perceived resources.

Third, the extension to multiple leadership styles in Study 2 broadens the theoretical discussion by showing that not all leadership behaviours equally shape belonging and job crafting. In particular, the negative impact of aversive leadership on organizational belonging resonates with Social Identity Theory (Hogg, 2001) and Leader-Member Exchange theory (Graen & Uhl-Bie, 1995), which stress that effective leaders foster identification and trust, while destructive leadership behaviours erode group identity and relational bonds. Our results reveal that when leaders act in ways that are perceived as hostile or punitive, employees' sense of being valued and connected is undermined, regardless of other organizational resources. This theoretical contribution enriches the literature on

destructive leadership (Schyns & Schilling, 2013) by empirically linking aversive leadership to reduced organizational belonging.

Finally, Study 2 revealed that directive, transactional, and transformational leadership types did not show significant direct effects on belonging or job crafting, contrary to some previous evidence (e.g., Bass, 1999; Breevaart et al., 2014). This finding refines theoretical debates by suggesting that in contexts characterized by high autonomy and fluid team structures, such as IT work, these leadership styles may not provide the psychological resources or social identity reinforcement necessary to foster belonging. Instead, empowering leadership emerges as uniquely suited to these environments, as it provides employees with flexibility and recognition in ways aligned with their needs for autonomy and relatedness.

6.3. Practical implications

From a practical perspective, the findings carry several implications for organizations, particularly those operating in knowledge-intensive and remote work contexts. First, organizations should actively cultivate empowering leadership behaviours, as these have the most consistent and positive effects on both belonging and proactive work behaviours. Leadership development programmes should therefore focus on training managers to grant autonomy, encourage participation, and provide developmental feedback, as these behaviours simultaneously enhance employees' intrinsic motivation and strengthen their organizational connection.

Second, the results underscore the risks of aversive leadership. Even when infrequently perceived, this leadership type exerts a strong negative influence on belonging, undermining employees' integration into the organization. Organizations must therefore implement mechanisms to monitor and reduce destructive leadership practices, which may otherwise counteract the benefits of positive leadership initiatives.

Third, the mediating role of job crafting suggests that organizations should not only foster empowering leadership but also actively encourage job crafting as a complementary practice. Interventions such as job crafting workshops (van den Heuvel et al., 2015) could help employees recognize opportunities to proactively redesign their work, thereby amplifying the effects of empowering leadership. This is particularly relevant for IT workers, whose roles are often fluid and project-based, making job crafting a natural avenue for aligning tasks with personal strengths and preferences.

Finally, the findings highlight the importance of leadership in remote and project-based work contexts. For IT professionals, leaders often constitute the most direct and enduring link to the organization. Organizations should therefore recognize the symbolic and relational role of leaders in sustaining belonging and ensure that leaders are adequately equipped to serve as representatives of organizational identity and culture.

6.4. Study limitations

There are a few limitations identified to our work, to begin with, the sampling method: a convenience sample was used, participants were selected based on their easy accessibility and proximity to the researchers. This is a non-probability method based on accessibility. As stated before on the “Sample and Procedure” section, this method is suitable for exploratory research, however it may introduce selection bias and limit the potential for generalization to the broader population of IT professionals.

Other important limitation concerns the internal consistency of certain subdimensions within the measurement instruments. While most subdimensions demonstrated good reliability, some showed low Cronbach’s alpha values or non-significant Pearson correlation coefficient. As mentioned earlier, “Safety” within organizational belonging show reliability issues with a non-significant r , while “Expressing Idealism” within transformational leadership reveals low Cronbach’s alpha value. These results suggest that the items within these subdimensions may not have been interpreted consistently by respondents or may not adequately capture the intended construct. This issue may have been influenced by the translation of the original scales into Portuguese, potentially altering item clarity or meaning. Additionally, cultural factors and the specific context of IT professionals in Portugal may have affected how certain abstract concepts were perceived. Although these subdimensions were retained in the statistical analysis to preserve theoretical foundation and ensure comparability with existing literature, their low reliability should be considered when interpreting findings related to these dimensions.

One significant limitation was the final sample size, which suffered from an unusually high attrition rate of 43% between waves 1 and 2. The implementation of a reminder mechanism, intended to support participation in wave 2, was incompatible with the survey platform, possibly causing participants to abandon the survey prematurely. The reminder was presented before submission of wave 1 because there was no available method to give

complementary instructions to participants after submission. In consequence many responses were lost due to unmatched codes between waves. This design flaw likely led some participants to navigate away from the main survey before completing it, reducing the final sample size. Resorting to a better survey tool could have helped maintain coherence throughout both waves. This issue may have compromised the statistical power and representativeness of the result.

Another limitation of our study may be the administration of self-reported questionnaires. This can introduce a self-report bias, due to social desirability bias, recall bias or response distortion (Podsakoff et al., 2003).

There is also an issue with the target of the online survey: our study focused solely on the followers' perception, excluding the leaders' viewpoint. The lack of leaders perspective may limit the understanding of how leadership intentions align with employee's experience, while grounding the findings only on the employee's perceptions.

It is important to stress that this study has contextual limitations. The sample being restricted to IT workers in Portugal, which limits generalization to other sectors or geographic regions. The nature of IT workers context, with remote work, highly flexible setting, with increased autonomy in comparison to other sectors, was the reason we chose this theme. However, it is important to state this unique context is likely to influence how leadership and organizational belonging are perceived. Whether these studies extend to other sectors or geographies warrants investigation.

Furthermore, during the literature review became the understanding that there were uncontrolled variables on our work. For example, proactive personality, which is known to influence the presence of job crafting behaviours, was not controlled in either studies. Likewise, other personality characteristics may influence both the presence of job crafting and the sense of organizational belonging.

6.5.Future research

Future research should further investigate the impact of remote work on organizational belonging, since it is a pressing issue. As market environments evolve and economic development accelerates, organizations face increasingly intense competition and complex, shifting landscapes (Dong, 2023). Companies face enormous challenges balancing

employees' desire for remote flexibility with the need to maintain engagement and connection, research should explore the impact of flexible arrangements on organizational belonging among IT workers in Portugal.

Another interesting line of research to pursue would be adopting a longitudinal approach to assess how leadership behavioural types influence the sense of organizational belonging and the presence of job crafting over time, providing insights into cause-and-effect relationships. Our work was a two-phase online questionnaire but represented a cross-sectional design, since it had no comparison between the two collected data from the two moments. In contrast, a longitudinal design could elicit better conclusions about how outcomes may fluctuate with changes in leadership behavioural types, and whether mediator variables would be significantly responsible for such changes over time. Because IT context is fluid and not constrained by commonly fixed parameters, such as physical space, it would be important to understand how these workers relate to their perceived leadership as conditions change (Zielińska et al., 2025)

Furthermore, investigating generational differences, by assessing the impact of age and generational cohorts, on organizational belonging and leadership perception could provide value insight. Different generations may respond differently to leadership behavioural types, as previous research have suggested (Li et al., 2023), especially in such dynamic work environments as in the IT sector. In consequence, research could provide guidance to organizations in tailoring leadership strategies to diverse age groups, for example to GenZ and Millennials.

Since the IT sector is such a unique context, it would be interesting to apply equivalent research assessing the leadership-belonging relationship but on other sectors, such as healthcare or education, and assess how findings could vary. Future research should assess if previous findings hold in. Expanding to different geographies would help determine the influence of cultural and economic contexts on leadership effectiveness and organizational belonging. Or as an alternative, findings in different geographies could allow academics to identify patterns on the leadership-belonging relationship that are constant besides cultural and economic changes in context.

As mentioned before on the limitations' section, our work lacks the leader perspective, capturing only the followers' perceptions. Future research could benefit of including the leaders' point of view to compare intended leadership behaviours with the perceived by

followers. This dual perspective could uncover both gaps and alignments in leadership effectiveness.

For future work we highly recommend the use of survey platforms that allow better tracking across waves, either by allowing post-submission information or having embedded reminder mechanisms. This would reduce attrition, improve data coherence in multi-phase designs, and in consequence improve statistical power of the matched sample.

In future work, researchers should also consider personality traits as moderators. Including personality traits in the model could clarify if seen leadership effects are direct or moderated by the individuals' dispositions.

Proactive personality should be controlled due to its known influence on job crafting, but other personality traits should be evaluated according to previous findings that indicate could influence the leadership-belonging relationship.

7. Conclusion

This thesis aimed to explore how leadership influence employees' sense of organizational belonging, while also examining the mediating role of job crafting in these relationships, with focus on IT workers in Portugal. With this intent, we designed two studies: the first one evaluating only the effect of empowering leadership; and the second evaluating a set of five leadership behavioural types.

This empirical studies' findings support the idea that leadership styles matter. Empowering leadership consistently showed a strong positive impact on job crafting, as well as on organizational belonging. As for job crafting as a mediator, again, both studies confirmed that job crafting plays a significant mediating role, helping explain how leadership influences organizational belonging. Study 2 brought confirmation to the idea the aversive leadership has a significant negative impact on belonging, reinforcing the importance of avoiding negative leadership behaviours.

Our work findings contribute to leadership and organizational behaviour literature by two measures: providing an empirical analysis of a set of five leadership behavioural types and integrating job crafting as mediating mechanism. The results emphasize autonomy and proactive behaviour, which support theories such as self-determination (Manninen et al., 2022) theory and positive organizational scholarship (Caza & Caza, 2008).

According to our work, organizations should foster empowering leadership to enhance employees' engagement and sense of belonging, while highly discouraging aversive leadership. Leadership development programs should be designed to provide guidance on empowering leadership, as well as encouraging job crafting. These programs could be a strategic tool to improve organizational outcomes.

In conclusion, these studies provide evidence-based guidance for organizations to give priority to leadership development, in order to cultivate a stronger sense of organizational belonging. In a rapid evolving work environment, especially in the IT sector, understanding the dynamics between leadership, job crafting, and organizational belonging is a powerful tool to build resilient and engaged teams, that aggregate to the overall organization.

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Appendix A – Questionnaire 1st part

O impacto da liderança no sentimento de pertença à organização e o efeito mediador do *Job Crafting* em profissionais de IT em Portugal

Este questionário foi elaborado no âmbito da dissertação do Mestrado em Gestão, da Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Leiria.

A sua construção e processo de recolha asseguram o anonimato dos participantes. A resposta ao questionário é voluntária e os dados recolhidos serão utilizados unicamente para fins estatísticos e tratados de forma agregada.

Ao responder a este questionário, solicitamos que assinale a resposta que considerar mais adequada. Não existem respostas erradas, o importante é que responda com máxima sinceridade.

O preenchimento deste questionário demora cerca de 8 minutos.

Para enriquecer este trabalho de pesquisa, o questionário será complementado num segundo momento, para o qual receberá **instruções no final**.

Caso necessite de algum esclarecimento adicional, por favor, entre em contacto através do endereço de e-mail 2232507@my.ipleiria.pt.

* Indica uma pergunta obrigatória

Consentimento sobre a participação neste estudo: *

- Autorizo a recolha e tratamento das minhas respostas para os fins acima descritos.
- Não autorizo a recolha e tratamento das minhas respostas para os fins acima descritos.

O impacto da liderança no sentimento de pertença à organização e o efeito mediador do *Job Crafting* em profissionais de IT em Portugal

* Indica uma pergunta obrigatória

Perfil do inquirido

Atualmente, trabalha numa empresa de IT? *

- Sim
- Não

Perfil do inquirido

O seu principal local de trabalho é em Portugal? *

- Sim
- Não

Sentimento de Pertença

Pensando sobre a organização, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

1 - Discordo totalmente

2 - Discordo

3 - Não concordo nem discordo

4 - Concordo

5 - Concordo totalmente

A gestão demonstra um compromisso com a satisfação das necessidades dos colaboradores com deficiências. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Sinto-me confortável em ser eu próprio(a) no trabalho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Raramente sinto que sou "o único" (género, orientação sexual, raça, etc.). *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

As normas (ex.: código de vestuário, aparência, comportamento) são claramente *
compreendidas.

1 2 3 4 5

Discordo totalmente Concordo totalmente

Quando dou a minha opinião no trabalho, sinto que é valorizada. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Posso ter sucesso sendo a minha versão autêntica (quem eu sou, *
independentemente da posição).

1 2 3 4 5

Discordo totalmente Concordo totalmente

A minha empresa permite-me equilibrar a vida profissional e pessoal. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Sinto que os meus colegas compreendem quem eu realmente sou. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

As pessoas de todas as culturas e origens são respeitadas e valorizadas. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Piadas raciais, étnicas ou religiosas não são toleradas. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Sinto-me ligado(a) aos outros na minha organização. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

As minhas contribuições nas reuniões de equipa são valorizadas. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Os colaboradores são tratados de forma justa, independentemente das diferenças (ex.: raça, género). *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Colaboradores de diferentes origens interagem bem na nossa empresa. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Quando estou com pessoas da minha organização, sinto-me incluído(a). *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Posso expressar uma opinião contrária sem medo de consequências negativas. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Sinto-me aceite pelos outros na organização. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Tenho um sentimento de pertença a esta organização. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Job Crafting - A personalização das tarefas realizadas

Marque o número que melhor indica com que frequência realiza a ação descrita em cada afirmação.

Utilize a seguinte escala:

1 - Nunca

2 - Raramente

3 - Ocasionalmente

4 - Frequentemente

5 - Sempre

Altero a abrangência ou o tipo de tarefas que realizo. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Escolho assumir tarefas adicionais. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Relembro-me da importância que o meu trabalho tem para a comunidade no geral. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Penso nas formas como o meu trabalho impacta positivamente a minha vida. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Escolho ser mentor de novos colaboradores (oficialmente ou não). *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Organizo eventos especiais no local de trabalho (ex. celebração do aniversário de um colega). *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Relembro-me da importância que o meu trabalho tem para o sucesso da organização. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Dou preferência a tarefas que se adequam às minhas habilidades ou preferências. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Penso que o meu trabalho contribui para o meu propósito de vida. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Faço amizades com pessoas no trabalho que têm competências ou interesses semelhantes. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Organizo ou participo em atividades sociais relacionadas com o trabalho. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Introduzo novas abordagens para melhorar o meu trabalho. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Faço um esforço para conhecer bem as pessoas no meu trabalho. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Reflito no papel que o meu trabalho tem no meu bem-estar geral. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Introduzo novas tarefas mais adequadas às minhas capacidades ou preferências. *

	1	2	3	4	5	
Nunca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sempre

Liderança

Considerando a sua chefia, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

1 - Discordo totalmente

2 - Discordo

3 - Não concordo nem discordo

4 - Concordo

5 - Concordo totalmente

A minha chefia...

Encoraja-me a que eu me recompense com algo que aprecio quando faço uma tarefa especialmente bem *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Insiste para que eu assuma responsabilidades por minha iniciativa *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Insiste para que eu me recompense com algo de que gosto quando completo com sucesso uma tarefa importante *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a desenvolver as minhas capacidades e competências *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Aconselha-me a procurar por oportunidades nos problemas que enfrento *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Insiste para que eu pense nos problemas como oportunidades e não como obstáculos *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a procurar por oportunidades de aprendizagem *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me para que eu me esforce para aprender *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Encoraja-me a aprender coisas novas *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Encoraja-me para que eu me desenvolva pessoalmente *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Insiste para que eu trabalhe em equipa com os restantes colegas *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Aconselha-me a resolver os problemas quando eles aparecem, sem estar sempre *
à espera de aprovação

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Colabora comigo na definição dos meus objectivos de desempenho *

1 2 3 4 5

Discordo totalmente Concordo totalmente

O meu chefe e eu sentamo-nos em conjunto e procuramos estar de acordo relativamente aos meus objectivos de desempenho *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a procurar por soluções para os meus problemas sem supervisão *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me para que eu dê a mim próprio "uma pancadinha nas costas" quando supero um novo desafio *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a procurar oportunidades para aprender *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a encontrar soluções para os meus problemas sem as suas sugestões *

1 2 3 4 5

Discordo totalmente Concordo totalmente

O meu chefe e eu decidimos em conjunto quais devem ser os meus objectivos de desempenho *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Encoraja-me a encarar um mau desempenho como uma oportunidade para aprender *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Aconselha-me a coordenar os meus esforços com os outros elementos da equipa *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Perfil Profissional

Com que frequência interage com o seu líder/gestor direto? *

- Diariamente
- Algumas vezes por semana
- Uma vez por semana
- Menos de uma vez por semana

Quantos funcionários tem a empresa? *

- Menos de 10
- 10 - 50
- 51 - 200
- 201 - 500
- Mais de 500

Quantos anos de experiência tem na área de TI? *

- Menos de 1 ano
- 1 a 3 anos
- 4 a 6 anos
- 7 a 10 anos
- Mais de 11 anos

Há quanto tempo está sob a liderança do seu líder/gestor atual? *

- Até 3 meses
- 3 meses a 1 ano
- 1 a 3 anos
- 4 a 6 anos
- Mais de 7 anos

Qual é o seu modelo de trabalho atualmente? *

- Totalmente remoto
- Híbrido, 1 a 2 dias por semana no escritório
- Híbrido, 3 a 4 dias por semana no escritório
- Totalmente presencial

Perfil do inquirido

Habilitações académicas (grau completo) *

- Ensino secundário
- CTESP
- Licenciatura
- Mestrado
- Doutoramento
- Outro

Género *

- Masculino
- Feminino
- Prefiro não dizer

Idade *

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 ou mais

Próximos passos...

De forma a **enriquecer** esta pesquisa o questionário é complementado com uma segunda parte sobre Liderança, que deverá ser respondida passada **2 semanas** (aproximadamente).

Para isso deverá gerar um código de acordo com as seguintes instruções:

- A primeira letra do seu primeiro nome (Maiúscula);
- A primeira letra do seu último nome (Maiúscula);
- Os últimos 3 dígitos do seu número de contribuinte (NIF).

O código é fundamental pois permite ligar a reposta a ambas as partes.

Exemplo: **Maria Silva 000 000 123** -> **MS123** *

A sua resposta

Appendix B – Questionnaire 2nd part

[2^a parte] O impacto da liderança no sentimento de pertença à organização e o efeito mediador do *Job Crafting* em profissionais de IT em Portugal

De forma a **enriquecer** este trabalho de pesquisa o questionário foi dividido em dois momentos. A 1^a parte do questionário que pode ser respondida no [link](#) e esta 2^a parte a responder aqui.

A resposta à 2^a parte do questionário só deve acontecer passadas 2 semanas da resposta à 1^a parte.

Recordo que este questionário foi elaborado no âmbito da dissertação do Mestrado em Gestão, da Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Leiria.

A sua construção e processo de recolha asseguram o anonimato dos participantes. A resposta ao questionário é voluntária e os dados recolhidos serão utilizados unicamente para fins estatísticos e tratados de forma agregada.

O preenchimento deste questionário demora cerca de 5 minutos.

O código é fundamental pois permite ligar a resposta a ambas as partes.

Caso necessite de algum esclarecimento adicional, por favor, entre em contacto através do endereço de e-mail 2232507@my.ipleiria.pt.

* Indica uma pergunta obrigatória

Consentimento sobre a participação neste estudo: *

- Autorizo a recolha e tratamento das minhas respostas para os fins acima descritos.
- Não autorizo a recolha e tratamento das minhas respostas para os fins acima descritos.

Primeira parte do questionário

Recordo: Na primeira parte do questionário terá gerado um código único de acordo com as seguintes instruções:

- A primeira letra do seu primeiro nome (Maiúscula);
- A primeira letra do seu último nome (Maiúscula);
- Os últimos 3 dígitos do seu número de contribuinte (NIF).

Exemplo: **Maria Silva 000 000 123** --> MS123

O código é fundamental pois permite ligar a reposta a ambas as partes.

Código *

A sua resposta _____

Liderança Aversiva

Considerando a sua chefia, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

- 1 - Discordo totalmente
- 2 - Discordo
- 3 - Não concordo nem discordo
- 4 - Concordo
- 5 - Concordo totalmente

A minha chefia...

Consegue ser bastante intimidante. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Reprende-me quando o meu desempenho fica abaixo do esperado. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Tenta influenciar-me através da ameaça e intimidação. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Quando o meu trabalho não atinge o nível desejado, o meu chefe indica-mo. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Quando o meu desempenho é fraco, o meu chefe indica-mo. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Eu sinto-me intimidado(a) pelo comportamento do meu chefe. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Liderança Transformacional

Considerando a sua chefia, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

- 1 - Discordo totalmente
- 2 - Discordo
- 3 - Não concordo nem discordo
- 4 - Concordo
- 5 - Concordo totalmente

A minha chefia...

Questiona a forma tradicional de fazer as coisas. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Esforça-se para concretizar a sua visão ideal das coisas. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Mostra uma forte dedicação pessoal na perseguição de ideais ou propósitos de difícil alcance. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Encoraja-me a repensar ideias que nunca tinham sido questionadas antes. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Encoraja-me a ir mais além do que é normalmente esperado de alguém (ex.: esforço extra). *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Aborda um novo projecto ou tarefa de forma entusiasmada. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Enfatiza a importância de colocar em questão as opiniões mais tradicionais dos meus colegas de equipa. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Não tem medo de “enfrentar o sistema” se achar que isso é necessário. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Graças ao meu chefe, eu tenho uma visão clara do propósito da nossa equipa. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Transmite uma visão clara de quem e do que é a nossa equipa. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Mostra entusiasmo pelos meus esforços. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Transmite uma visão clara da direcção que a nossa equipa está a tomar. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Acentua a importância da nossa equipa dentro da instituição. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Olha para os problemas a partir de várias perspetivas diferentes. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

“Deixa-se levar” por uma ideia que parece perfeita em teoria mas que é muito difícil de alcançar na prática. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

É daqueles chefes não tradicionais, que “agitam com o sistema” quando é necessário. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Espera que eu dê 100% a toda a hora. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Não tem medo de quebrar as rotinas para encontrar diferentes formas de fazer as coisas. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Espera que eu tenha um desempenho ao meu melhor nível. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Procura por diferentes perspetivas quando está a resolver problemas. *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Liderança Transacional

Considerando a sua chefia, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

- 1 - Discordo totalmente
- 2 - Discordo
- 3 - Não concordo nem discordo
- 4 - Concordo
- 5 - Concordo totalmente

A minha chefia...

Recomendará que eu seja bem compensado(a) se tiver um bom desempenho *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Espera até que as coisas corram mal antes de fazer alguma coisa *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Foca-se no incumprimento das normas *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Permite que o desempenho caia abaixo dos limites mínimos antes de tentar fazer melhorias *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Manifesta o seu reconhecimento quando o meu desempenho é especialmente bom *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Acompanha de perto o meu desempenho à procura de erros *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Foca a sua atenção em irregularidades, erros, exceções e desvios da normalidade *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Diz-me o que eu fiz mal em vez de me dizer o que fiz bem *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Se eu tiver um bom desempenho, o meu chefe recomendará uma maior compensação *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Só começa a agir quando os problemas se tornam sérios *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Assinala os erros detectados *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Mostra uma forte crença na máxima "se não está estragado não precisa de ser arranjado" *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Passa o tempo a resolver problemas em vez de tentar perceber o que os provoca *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Recomendará que eu seja mais compensado(a) se tiver um bom desempenho *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Dá-me um feedback positivo quando eu tenho um bom desempenho *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Elogia-me quando eu tenho um desempenho acima da média *

1 2 3 4 5

Discordo totalmente Concordo totalmente

Liderança Diretiva

Considerando a sua chefia, marque o valor que melhor representa a sua opinião em relação a cada afirmação.

Utilize a seguinte escala:

- 1 - Discordo totalmente
- 2 - Discordo
- 3 - Não concordo nem discordo
- 4 - Concordo
- 5 - Concordo totalmente

A minha chefia...

Quando se trata do meu trabalho, o meu chefe dá-me instruções sobre como o realizar. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Dá-me instruções sobre como fazer o meu trabalho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Estabelece os meus objectivos de desempenho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Estabelece os objectivos para o meu trabalho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Dá-me ordens a respeito do meu trabalho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Define os objectivos para o meu desempenho. *

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente