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**Unravelling the link between Leadership  
styles and employees' Satisfaction with the  
leader: The mediating role of perceived Non-  
verbal immediacy**

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Master's Dissertation in Business Management

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To the star that lies in the sky

The one I always relied.

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## **ABSTRACT**

Currently, there is a growing awareness of the impact of employees in the organizational context. How leaders guide their employees, as well as their behavior, may be at the heart of the employees' sense of satisfaction with the leader. Thus, the present study aims to examine the mediation effects of employees' perceptions of their leaders' non-verbal immediacy on the relationship between employees' perceptions of leadership styles and their satisfaction with the amount of support received by the leader. Participants were 296 employees from the industry, real estate and construction sectors. Structural equation modeling analyses revealed that perceptions of leaders' non-verbal immediacy mediate the relationships between transformational, transactional and avoidant leadership styles and employees' satisfaction with the leader. In addition, the number of years of contact supervisor-employee moderate the relationships between leadership styles, non-verbal immediacy and satisfaction with the leader. Findings support and expand on previous research in leadership styles and employees' satisfaction showing the mediating role of non-verbal immediacy in these associations.

**Keywords:** Avoidance leadership, Leadership styles, Non-verbal immediacy, Professional satisfaction, Satisfaction with the leader, Transactional leadership, Transformational leadership.

# **Desvendando a ligação entre os estilos de Liderança e a Satisfação dos colaboradores com o líder: O papel mediador da percepção do imediatismo Não-verbal**

## **RESUMO**

No atual contexto organizacional, existe uma crescente conscienciização do impacto que os colaboradores poderão ter em todas as suas áreas de atuação. A forma como os líderes orientam os seus colaboradores, bem como o seu comportamento, poderá estar na base do sentimento de satisfação com o líder. Assim, o presente estudo visa examinar os efeitos de mediação do imediatismo não-verbal dos líderes na relação entre a percepção dos colaboradores sobre os estilos de liderança e sua satisfação com o apoio recebido pelo líder. Os participantes foram 296 colaboradores dos setores da indústria, imobiliário e construção. As análises de equações estruturais revelaram que a percepção do imediatismo não verbal dos líderes medeia as relações entre os estilos de liderança transformacional, transacional e de evitamento, com a satisfação dos colaboradores com o líder. Além disso, o número de anos de contato entre superior-colaborador modera as relações entre os estilos de liderança, o imediatismo não verbal e a satisfação com o líder. Os resultados apoiam e expandem os resultados de estudos anteriores sobre as relações entre os estilos de liderança e a satisfação dos colaboradores, demonstrando o papel mediador do imediatismo não verbal nessas associações.

**Palavras-chave:** Estilos de liderança, Imediatismo não-verbal, Liderança de evitamento, Liderança transacional, Liderança transformacional, Satisfação com o líder, Satisfação profissional.

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## INTRODUCTION

Non-verbal communication consists in a current theme and plays a vital role in understanding social interactions as well as organizational behavior (Bonaccio, O' Reilly, O' Sullivan, & Chiochio, 2016; Riggio & Feldman, 2005). In the context of non-verbal communication, non-verbal immediacy has been referred as an important variable in organizations (e.g., Richmond & McCroskey, 2000; Zhu & Anagondahalli, 2018), although it is necessary to develop more studies (Kumari & Pandey, 2011; Pribyl, Sakamoto, & Keats, 2004; Richmond & McCroskey, 2000), since it is a concept with the ability to positively affect interpersonal relationships (Jia, Cheng, & Hale, 2017; Richmond & McCroskey, 2000; Teven, 2007).

Progressively, organizations are becoming aware that their employees are the most valuable asset they have, growing concern for their professional satisfaction (Men, 2014; Richmond & McCroskey, 2000; Riggio & Feldman, 2005; Voon, Lo, Ngui, & Ayob, 2011). Thus, the leader's non-verbal immediacy improves the relationship he or she has with their employees, positively influencing their professional outcomes (Kumari & Pandey, 2011; Madlock, 2008). For example, in Portugal, happiness has been associated with higher levels of performance of employees in the industry, real estate and construction sectors (Silva, 2016).

Considering the research on leadership styles (e.g., Azevedo & Carvalho, 2014; Bass, Avolio, Jung, & Berson, 2003; Beyan et al., 2017; Northhouse, 2013), non-verbal immediacy (e.g., Richmond & McCroskey, 2000; Riggio & Feldman, 2005; Zhu & Anagondahalli, 2018), and satisfaction with leadership (e.g., Girma, 2016; Lashbrook, 1997; Rad & Yarmohammadian, 2006; Skansi, 2000), does the perceptions of non-verbal immediacy of the leader mediate the associations between leadership styles and satisfaction with the leader? To answer this question, the purpose of the present study is to examine the mediating effects of the perception of the leaders' non-verbal immediacy in the relationship between the perception of leadership styles and the satisfaction with the leader by employees of industry, real estate and construction sectors. Specifically, this study intends to examine the relationships between (1)

leadership styles and satisfaction, (2) leadership styles and non-verbal immediacy, and (3) non-verbal immediacy with satisfaction. The state of the art about these associations will be reviewed in the following sections.

## LITERATURE REVIEW

### Leadership

The concept of leadership has been studied under various strands and theoretical perspectives. This notion is characterized as dynamic, since it is constantly evolving, resulting in the creation of innumerable conceptions (Solà, Badia, Hito, Osaba, & García, 2016), resulting in the non-existence of a universal definition (Mitonga-Monga, Coetzee, & Cilliers, 2012). Despite the countless meanings present in literature, according to Nahavandi (2000), the concept of leadership has three elements in common to most definitions, namely an interpersonal phenomenon, since there are no leaders without followers; the influence used to achieve common objectives; and the presence of any form of hierarchy, that can be formal or informal. Therefore, was selected for the present study, a definition supported by several scientific studies that features leadership as a process of interaction and influence between leaders and employees to achieve shared objectives (Darioly & Mast, 2013; Mitonga-Monga et al., 2012; Northouse, 2013; Sauquet, 2008; Solà et al., 2016; Stogdill, 1950; Voon et al., 2011).

As Bolden (2004), the concept of leadership may have started with classical theories, notably with the theory of *Great Man* that defended the presence of innate qualities in leaders. In opposition, the theory that gave focus to the behaviors of leaders appear, and with this ism there would be the conjecture to develop the qualities necessary to create effective leaders (Robbins & Coulter, 2012; Zareen, Razzaq, & Mujtaba, 2015). Afterward, situational theories were presented defending that behaviors of leaders should vary according to the circumstances in which leaders are involved (Griffin, 1999; Zareen et al., 2015). One of the most studied contemporary theoretical approaches has been the *Full Range Leadership Model* (FRL) that characterizes the transformational, transactional and avoidance leadership style (Bass, 1985; Bass & Avolio, 1994; Furtner, Baldegger, & Rauthmann, 2013). It is important to recognize that leaders may resort to the leadership style they consider most appropriate

on different situations and may also use more than one style simultaneously (Azevedo & Carvalho, 2014; Bass, 1985). Next, each of the leadership styles will be discussed.

### *Transformational*

Transformational leadership represents one of the most popular approaches in literature (Northouse, 2013; Song, Kolb, Lee, & Kim, 2012), and according to Bass and Riggio (2006), it may be a consequence of the emphasis on intrinsic aspects especially in terms of emotional support and motivation of employees. Transformational leadership is considered a style that motivates employees, perceiving and appealing to their interests, as well as influencing them to overcome individual interests for the good of the group or organization (Bass & Avolio, 1994; Men, 2014; Souza, Souza, Souza, & Carneiro, 2017). Transformational leaders practice an articulated vision, providing the organization with a suitable business model (Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Song et al., 2012). These leaders motivate to maintain high performance expectations and encourage employees to accept collective goals (Dumdum, Lowe, & Avolio, 2002; Podsakoff et al., 1990; Song et al., 2012), and the mission and vision of the organization (Bass & Avolio, 1994; Ertureten, Cemalcilar, & Aycan, 2013), always taking into account the individual needs of each employee (Bass & Avolio 1994; Schyns & Mohr, 2004). Furthermore, transformational leaders establish good interpersonal relations with employees (Riggio & Feldman, 2005), promoting trust, commitment and loyalty, seeking to develop higher levels of employees' performance (Bass, 1985; Dumdum et al., 2002; Zareen et al., 2015).

Transformational leadership exhibit five structural dimensions: *Idealized Attributes* that represents the actions of leaders as models, influencing the behavior of their followers; *Idealized Behaviour* that although it has the same objective as the previous dimension, it focuses on specific behaviors of conducts that are desired to be followed (Alonso, Saboya, & Guirado, 2010); *Inspirational Motivation* in which the leader shares his vision, promoting commitment and team spirit; *Intellectual Stimulation* through which the leader seeks to stimulate creativity and innovation, questioning old

problems with new approaches; and finally, *Individualized Consideration* concerning the creation of an atmosphere of support, promoting the development of employees, and offering feedback and delegating responsibilities (Bass et al., 2003; Hickman, 2010; Song et al., 2012; Souza et al., 2017).

### *Transactional*

Other leadership style approached at FRL (Bass, 1985) represents transactional leadership. The foundation of this leadership style focuses on performance exchanges for rewards between the leader and employees. This implies the execution of tasks according to the will and direction of the leader, clarifying the roles and requirements of each task and rewarding the efforts of employees. These rewards may be negative, such as disciplinary action, or positive, namely praise or recognition, depending on the behaviour of the employee (Bass, 1985; Robbins & Coulter, 2012; Souza et al., 2017). Transactional leadership guides employees towards established goals and scope of results, so they employ the necessary efforts to meet the expectations of the leader (Bass, 1985; Clarke, 2013; Robbins & Coulter, 2012; Souza et al., 2017). Transactional leaders become aware of the interests of their employees and provide rewards and recognition according to their immediate needs (e.g., Dumdum et al., 2002; Northouse, 2013; Saravo, Netzel, & Kiesewetter, 2017) in exchange for achieving the established goals and objectives, through short and long-term rewards (Saravo et al., 2017; Voon et al., 2011). These leaders closely follow their employees, first instructing the requirements of the task, and subsequently observing the performance of employees, based on predetermined parameters. Ultimately, leaders take the necessary actions to reward good performances or correct behaviors (Clarke, 2013; Sosik & Jung, 2010; Zareen et al., 2015).

Transactional leadership comprises two dimensions: *Contingent Rewards*, i.e., the leader clarifies the objectives that must be achieved and use rewards in exchange for employees' effort and performance; and *Active Management by exception*, which signifies the active monitoring of the leader and the employing of corrective actions

before the occurrence of problems (Antonakis, Avolio, & Sivasurbramaniam, 2003; Bass & Avolio, 1994; Clarke, 2013; Voon et al., 2011).

### *Avoidance*

The last leadership style presented in FRL model (Bass, 1985) is avoidance leadership. This style is characterized by avoiding to intervene when mistakes are made, and no leadership function is exercised to prevent the existence of errors and problems (Saravo et al., 2017). Leaders who exercise avoidance leadership tend merely to intervene with corrective measures only when problems and errors occur (Antonakis et al., 2003; Bass & Avolio, 1994; Clarke, 2013; Voon et al., 2011).

In accordance with Alonso et al. (2010), a dimension of avoidance leadership represents the *laissez-faire* leadership that is characterized by exercising little or no direction, offering employees' freedom to determine goals, decision-making and problem-solving, without guidance. The core of this leadership is based on the independence of employees, due to the avoidance of leadership behaviors by leaders (Bass & Avolio, 1994; Skogstad, Hetland, Glaso, & Einarsen, 2014). This style is effective when employees are highly skilled, experienced and motivated (Bass & Avolio, 1994; Sharma & Singh, 2013), as well as in situations where they perform routine, low complex tasks, with less demanding criteria or with predetermined rules (Zareen et al., 2015). To point out that, this style represents a good opportunity to learn and develop the necessary organizational tools, as it is a leadership that gives employees total autonomy (Bradford & Lippitt, 1945; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Zareen et al., 2015). Leaders who practice *laissez-faire* leadership are characterized by not developing efforts to motivate their employees, nor recognize and meet their needs (Bass & Avolio, 1994; Sharma & Singh, 2013). They exercise little control and encourage employees to take the decisions they deem necessary, as they have full confidence in their capacities and performance (Eagly et al., 2003; Sharma & Singh, 2013). They also do not provide feedback (Sharma & Singh, 2013), yet they supply employees with the resources and tools needed to make the tasks possible to perform (Eagly et al., 2003). However, they

are considered flexible leaders, since they are able to adapt to change with easiness and to transmit that flexibility to employees, as they believe that innovation and creativity can come from that same flexibility and freedom (Sharma & Singh, 2013).

### **Non-verbal Communication**

Non-verbal communication dominates human transmission of information and represents an essential factor to understand social and organizational relationships (Bellou & Gkorezis, 2016; Darioly & Mast, 2013; Riggio & Feldman, 2005).

Researchers tend to agree that non-verbal communication is phylogenetically more ancient than verbal communication (Frank & Shaw, 2016; White et al., 2009). Only in the last 150 years they began to address the role of biology in non-verbal communication, mainly through the notes of Duchenne of Boulogne in 1862, on the differentiation of the types of smiles that are used according to the emotions (Frank & Shaw, 2016). However, in academic terms, the awakening to the importance of non-verbal communication began with the reprinting of essential volumes, notably the publication of the biologist Charles Darwin, *The Expression of the Emotions in Man and Animals*, in 1872, that approached the role of facial expressions in communication processes. Other publications, written in a cultural perspective, were equally important for this awakening, especially *The Silent Language* de Edward T. Hall, in 1959, *The Presentation of Self in Everyday Life* de Erving Goffman, in 1959, and *Kinesics and Context* de Ray L. Birdwhistell, in 1970, (see Keating, 2016, for more references). Another researcher who showed interest in this topic and defined the phenomenon of non-verbal communication as “*an elaborate secret code that is written nowhere, known by none, and used by all*” was Sapir (1927, p. 556). Thereby, the concept of non-verbal communication relates to any form of communication that does not depend on words or language (Bellou & Gkorezis, 2016), as well as, according to Bonaccio et al. (2016), the sending and receiving of thoughts and feelings through behaviors that are not verbally expressed. Note that non-verbal communication represents the main source of information when the reliability of verbal language is questioned by individuals, since

some researchers have demonstrated that 65% to 90% of interpretation transmitted in social interactions seems to accrue from non-verbal communication (Crane & Crane, 2010; Darioly & Mast, 2013).

Non-verbal communication depends not only on biological but also cultural aspects. In the biological perspective, these behaviors and their meanings are the result of adaptation to the context. In cultural terms, it is possible to observe high universality of non-verbal behaviors in various cultures, particularly regarding basic emotions such as happiness, sadness, fear, anger, disgust and surprise. However, cultural forces also influence and shape non-verbal expressions and their significance in the person. It is also possible to identify differences in terms of culture, such as the fact that women tend to be more expressive in terms of face and body movements when compared with men (Bonaccio et al., 2016).

The importance of non-verbal communication is mainly due to the fact it significantly influences social interactions through various functions, notably by providing information that complements verbal communication, regulating the interaction itself and expressing intimacy (Bellou & Gkorezis, 2016). Individuals do not have the ability to plan and control all non-verbal behaviors they exhibit, even when they are trained for such (Poggi & Vincze, 2008), originating that non-verbal communication evidence the true feelings and attitudes that the speaker did not intend to demonstrate, as often occurs, for example, in anxious behaviors (e.g., Darioly & Mast, 2013).

### *Non-verbal Immediacy*

The term immediacy, was originally introduced in the literature of non-verbal communication by the social psychologist Albert Mehrabian, in 1966, with the publication *Immediacy: An Indicator Of Attitudes In Linguistic Communication*. He realized that people have the tendency to move toward people or things they are attracted to and, inversely, to avoid things that negatively assess (Richmond & McCroskey, 2000; Riggio & Feldman, 2005; Zhu & Anagondahalli, 2018). This concept

was not initially proposed as a communication construct, but rather as a psychological explanation of the non-verbal behavior (Zhu & Anagondahalli, 2018).

Non-verbal immediacy was investigated in the educational scope, being adopted to describe countless teaching behaviors, and producing very convincing results (Zhu & Anagondahalli, 2018). It was from these results that Richmond and McCroskey (2000) have proposed *the principle of immediate communication*, that can be applied in any context of interpersonal communication. The concept of non-verbal immediacy can be defined as non-verbal communication behaviors that increase the degree of physical or psychological proximity between individuals (Mehrabian, 1966; Park, Lee, Yun, & Kim, 2009; Riggio & Feldman, 2005; Zhu & Anagondahalli, 2018). When the speaker employs non-verbal immediate behaviors, the interlocutor will positively evaluate these behaviors and feel closer to the speaker (Jia et al., 2017; Richmond & McCroskey, 2000). This notion is also associated with increased sensory stimulation, accessibility and availability for communication (Andersen, 1985; Kennedy, Baxter, & Belpaeme, 2017; Pribyl et al., 2004). Non-verbal immediacy represents several behaviors, including gestures during communication, visual contact, outline of smiles, physical contact, in a non-threatening manner, relaxed body posture, approximation in relation to others, sitting close to another, using speech in an animated manner and be vocally expressive (Kennedy et al., 2017; Park et al., 2009; Richmond, Gorham, & McCroskey, 1987; Richmond & McCroskey, 2000; Riggio & Feldman, 2005; Walker & Hackman, 1991).

### **Professional Satisfaction with Leadership**

Professional satisfaction and satisfaction with leadership represents a topic of great focus in literature, having received a lot of attention from professionals (Girma, 2016; Men, 2014; Ni, 2007) and researchers (Men, 2014; Ni, 2007). This concept is defined as a positive emotional state of the individual to specific aspects in the workplace (Girma, 2016; Igbaria & Buimaraes, 1993; Locke, 1976; Song et al., 2012; Voon et al., 2011). The individual shows this emotional state in relation to his work according to his feelings, beliefs and behaviors (Akehurst, Comeche, & Galindo, 2009; Voon et al.,

2011). According to Voon et al., (2011), employees who feel fulfilled with their work and rewarded tend to feel greater professional satisfaction.

Thus, professional satisfaction drifts from a cognitive process, as the individual compares aspects of his work with a framework of reference and with his expectations (Girma, 2016). This concept contains two components, particularly an intrinsic component and an extrinsic. Intrinsic satisfaction relates to what the individual perceive in relation to the nature of tasks that work represents, while extrinsic satisfaction corresponds to the feelings that the external aspects of work arouse in the individual (Voon et al., 2011).

To Girma (2016), professional satisfaction can branch from discrepancies between what is offered and the personal expectation; the level of individual needs that are met; or the degree of individual values. Factors such as the nature of the task, autonomy and feedback (Ertureten et al., 2013), the sense of loyalty perceived by the employees, job security, good remuneration and recognition, good working conditions, possible promotions and career advancement, but also the support provided in case of personal problems, originate higher levels of professional satisfaction (Rad & Yarmohammadian, 2006).

Studies show that employees' satisfaction with work is directly related to the satisfaction with the leader (e.g. Harter, Schmidt, & Hayes, 2002), and it is also relevant to mention that individuals tend to perceive as leaders, the individuals with whom they are most satisfied in terms of performance or behaviors (Mast, Jonas, Cronauer & Darioly, 2012).

According to Voon et al., (2011), the implementation of effective leadership and the presence of professional satisfaction in employees represent two essential factors for organizational success. An effective leader has the ability to provide the intended direction for the organization, as well as to guide his employees to reach the planned objectives. It is notorious that employees with higher levels of professional satisfaction are more motivated to exert greater effort in fulfilling assigned tasks and respect organizational interests. Organizations that have leaders who adopt appropriate

leadership styles will be more likely to lead their employees to a state of positive professional satisfaction.

To notice that, organizational culture and internal leadership style (Girma, 2016) represent two factors capable of increasing the feeling of satisfaction of employees. Still, abusive supervision behaviors, limitation of communication between employees and decreased autonomy, are likely to diminish the degree of professional satisfaction of employees (Ertureten et al., 2013). In this way, the tasks performed, and the responsibilities assigned to employees must correspond to their competences. If not appropriate, it may lead to increased professional dissatisfaction, decreased performance, and consequently, the non-achievement of the organizational objectives (Farooqui & Nagendra, 2014).

### **Leadership Styles and Professional Satisfaction with Leadership**

Leadership style has a direct impact on the relationship between leaders and employees, which consequently influences performance and professional satisfaction (Girma, 2016). It should be noted that leadership plays a central role in determining the feeling of satisfaction (Girma, 2016; Lashbrook, 1997; Rad & Yarmohammadian, 2006; Skansi, 2000), according to the leadership style that leaders decide to apply, to the extent that different styles will have distinct effects and will influence in different ways the satisfaction of employees (Bogler, 2000; Heller, 1993; Judge & Piccolo, 2004; Voon et al., 2011).

Transformational leadership represents one of the most effective and predictive leadership styles in terms of organizational results, especially professional satisfaction (Barling, Weber, & Kelloway, 1996; Bass, 1985; Ertureten et al., 2013; Hater & Bass, 1988). Thus, transformational leadership has been associated with a positive impact on employees' feelings and behaviors regarding professional satisfaction (Bycio, Hackett, & Allen, 1995; Men, 2014; Schaubroeck, Lam, & Peng, 2011). Other scientific investigations also evidenced a positive relationship between transformational leadership and satisfaction of employees (Judge & Piccolo, 2004; Skogstad et al., 2014b; Voon et al.,

2011). Even more, Piccolo et al., (2012) considered this type of leadership as one of the most important indicators of professional satisfaction. In focus is the dimension of individualized consideration, since it is the characteristic of this leadership style that has achieved a greater relation with professional satisfaction in several studies (Bass, 1985; Lowe, Kroeck, & Sivasubramaniam, 1996; Mast et al., 2012; Solà et al., 2016).

Transformational leaders have the ability to stimulate both organizational commitment and professional satisfaction, due to particular aspects of this leadership style (Bolkan & Goodboy, 2011; Erkutlu, 2008). These positive effects are the intense emotional component that transformational leadership exhibit and the strong relationship between leaders and employees (Bass, 1985; Cheng, Yen, & Chen, 2012).

In the other hand, transactional leadership shows contradictory results in research (cf., Dumdum et al., 2002; Voon et al., 2011). There are studies that consider this style an indicator of professional satisfaction (e.g. Zareen et al., 2015), whereas others do not find meaningful relationships between these two variables (e.g. Bolkan & Goodboy, 2011; Erkutlu, 2008; Voon et al., 2011). Several studies showed a higher correlation between contingent rewards and the satisfaction of employees, in comparison with other dimensions of this leadership style. Specifically, the dimension of active management by exception produce more inconsistent results (e.g., Dumdum et al., 2002; Judge & Piccolo, 2004; Podsakoff, Todor, & Skov, 1982; Skogstad et al., 2014a; Solà et al., 2016). This positive relationship shows that the assignment of contingent rewards influences the degree of feeling of employees in relation to their work (Voon et al., 2011). It seems impossible to conclude that transactional leadership has a positive relation with employees' satisfaction, as the opinions are divided. However, despite transactional leadership contribute to professional satisfaction of employees, through the dimensions previously exposed, it may present varying results in different contexts (Zareen et al., 2015).

Regarding the relationship between avoidant leadership and professional satisfaction, passive management by exception was negatively correlated with professional satisfaction (Dumdum et al., 2002; Solà et al., 2016; Voon et al., 2011), and *laissez-faire* also proved to have a negative association in several studies (e.g., Dumdum

et al., 2002; Piccolo et al., 2012; Skogstad et al., 2014; Solà et al., 2016). According to Bolkan and Goodboy (2011), leaders who exhibit non-transformational characteristics have no ability to stimulate the feeling of satisfaction in employees. DeRue, Nahrgang, Wellman, and Humphrey (2011), also sought to study leadership styles and professional satisfaction, and evidenced a negative correlation between *laissez-faire* and satisfaction, as opposed to transformational and transactional leadership styles. The authors have justified these negative correlations, concluding that leaders who employ avoidance leadership do not act when employees need leadership. In addition, they are very inactive and mostly ineffective, which can lead to the emergence of negative effects, as a stressful working environment, and consequently the decrease of professional satisfaction.

Another aspect that might influence the level of satisfaction of employees in terms of leadership concerns the time of contact in relations between leaders and employees. In fact, the relationship between leader and employee is a crucial factor in determining the level of employee satisfaction (Gerstner & Day, 1997; Volmer, Niessen, Spurk, Linz, & Abele, 2011). All individuals have different characteristics, so it is not possible for leaders to establish the same type of relationship with all employees. Nevertheless, with the cultivation of a good relationship between leaders and employees, leadership can contribute to a mutual linking relationship and influence the behavior and attitudes of employees (Fan & Han, 2018; Gkorezis, 2015). Various studies (e.g., Fan & Han, 2018; Liden, Sparrowe, & Wayne (1997); Volmer et al., 2011) demonstrate associations between the quality of the relationship between leader and employee, and the feeling of professional satisfaction. The explanation for this positive association may be based on Epitropaki and Martin (2005) that showed the intrinsic and extrinsic benefits from the good relationship between the employee and the leader, but also from the sense of privilege that employees can feel when establishing a relationship of proximity with the leader (Locke, 1976; Volmer et al., 2011).

## **Non-verbal Immediacy and Professional Satisfaction with Leadership**

Communication between leader and employee is often left out in terms of the importance to professional satisfaction. This relationship is full of immediate non-verbal behaviors between the individuals (Witos, 2015). Therefore, effective communication in interpersonal relationships between leaders and employees in the workplace is essential, and non-verbal behaviors such as facial expressions, eye contact, and others are fundamental aspects to the preservation of these relations (Burgoon, Buller, & Woodall, 1996; Witos, 2015). The communication between leaders and employees is a very important aspect in the analysis of professional satisfaction, since the leader is considered as a vehicle of influence for the satisfaction of the employee (Miles, Patrick, & King, 1996; Witos, 2015). When employees consider themselves satisfied with the communication exerted by the leader, they also feel satisfied with the leadership (Madlock, 2006), because the perception of the quality of interactions between leader and employee will be determined by non-verbal immediacy, i.e., it represents a factor of influence in the satisfaction with the leader perceived by the employee (Teven, 2010; Witos, 2015).

Specifically, in terms of the relationship between leaders' non-verbal immediacy and employees' professional satisfaction, it is possible to check through several studies that there is a positive correlation between these two concepts (e.g., Jia et al., 2017; Richmond & McCroskey, 2000; Teven, 2007; Voon et al., 2011). Thus, findings indicated that employees showed greater professional satisfaction when leaders adopted non-verbal immediate strategies and behaviors (e.g., intimacy, willingness to listen, openness and empathy), and inverse behaviors (e.g., expressions of superiority and task orientations), revealing strong negative correlations with feelings of satisfaction with leadership (Teven, 2007). Satisfaction with the leader is positively related with leaders' non-verbal immediate behaviors, because the leader is considered more interpersonally appealing, causing employees to be more likely to express positive attitudes and an improvement in the communication and relationship between leaders and employees (Jia et al., 2017).

## **Leadership Styles and Non-verbal Immediacy**

Non-verbal communication plays a key role in leadership, as it becomes more important than verbal communication in this context. When a conflict occurs between leader and employees, the tendency of the employees is to trust more in the non-verbal aspects of the leader (Darioly & Mast, 2013). Leaders who use various non-verbal behaviors are perceived by employees as more effective (Bellou & Gkorezis, 2016), and these behaviors are linked to their leadership style (Darioly & Mast, 2013).

Specifically, in relation to the association between transformational leadership and non-verbal immediacy of the leader, for Bolkan and Goodboy (2011), there is evidence that the two concepts are related since transformational leaders seem to demonstrate several immediate non-verbal behaviors. Other studies relate non-verbal communication with transformational leadership (Awamleh & Gardner, 1999), and results were determined by the experimental manipulation of speakers. It was possible to conclude that the speaker with the most expressive non-verbal behavior was considered the most charismatic (i.e., dimension of transformational leadership), and that the most manipulative non-verbal behaviors were visual contact, gestures, facial expressions and speech (Riggio & Feldman, 2005). Charismatic leaders who communicate using non-verbal immediacy behaviors tend to influence socially, causing reciprocal behaviors, and, consequently, contributes to the effectiveness of leader (Bonaccio et al., 2016; Cherulnik, Donley, Wiewel, & Miller, 2001).

Regarding transactional leadership and non-verbal immediacy, these two concepts are related in the proximity of the leader to employees. Hence, proximity represents one of the most important components of non-verbal immediacy (Jia et al., 2017; Richmond & McCroskey, 2000). According to some researchers (e.g., Antonakis & Atwater, 2002; Howell, Neufeld, & Avolio, 2005), the influence process of the leader depends on the closeness with employees. This may have several representations, including physical proximity, perception of social proximity and frequency of interaction perceived by employees. Thus, physically distant leaders are perceived by employees as less able to provide timely rewards and professional recognition, and it is not possible

to apply the dimension of contingent rewards of transactional leadership (Antonakis & Atwater, 2002; Howell et al., 2005; Podsakoff, Todor, Grover, & Huber, 1984). However, specifically to transactional component of rewards, Howell and Hall-Merenda (1999), exhibited distinct results, since in their study contingent rewards produced a more positive effect in contexts where the leader was more distant.

Likewise, the association between non-verbal immediacy and avoidance leadership may also come from the proximity between the leader and his employees. As it has already been mentioned, it concerns a fundamental component of non-verbal immediacy. Particularly, passive management by exception is related to the physical distancing between leaders and employees, because professional relationships when distant are more likely to be regulated by this dimension, i.e., leaders will be more likely to practice non-contingent punishment and will be perceived by employees as unjustified. In fact, in circumstances of distancing between leaders and employees, it seems to dispel better interactions between them, and employees understand the behavior of the leader as arbitrary, since they understand that the leader did not have the opportunity to observe and evaluate their performance (Antonakis & Atwater, 2002; Howell & Hall-Merenda, 1999). According to Hansbrough (2012), leaders who practice high avoidance leadership and who avoid the emotional relationship with their employees, have high distance relationships with their employees.

### **Justification of the study**

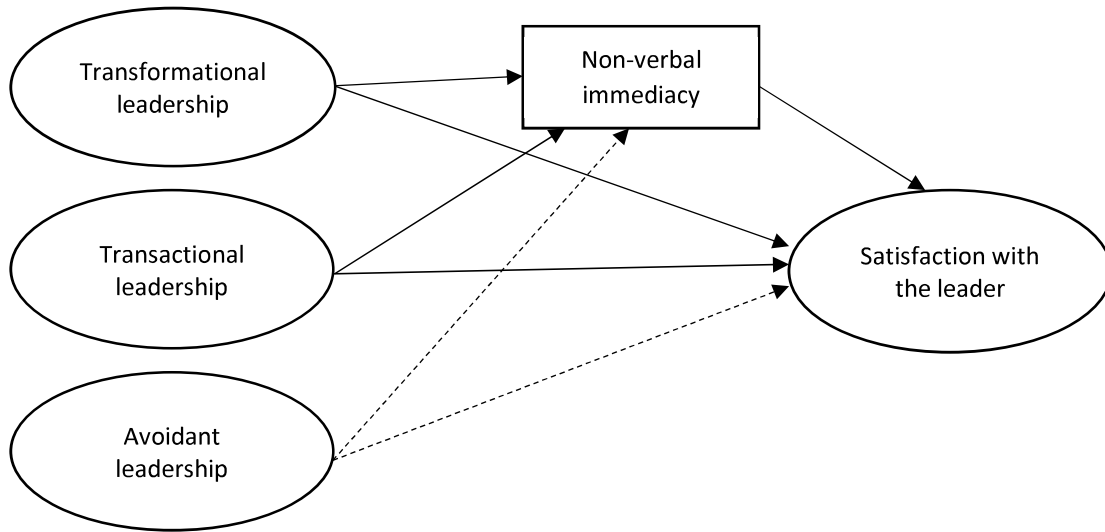
Considering previous studies (e.g., Richmond & McCroskey, 2000) it is possible to verify that the existing literature about non-verbal communication in organizational context is limited. Although there are some studies that reflect on non-verbal behaviors in this context, it is necessary to deepen the theme (Bellou & Gkorezis, 2016; Schyns & Mohr, 2004). Another factor to consider is that the existing literature is distributed across several fields, which may pose a challenge for business-area researchers interested in exploring the effects in the organizational context (Bellou & Gkorezis, 2016). In addition, in terms of the non-verbal immediacy the majority of studies in this

area are centered in the educational context, not existing relevant investigations in the organizational context (Kumari & Pandey, 2011; Pribyl et al., 2004; Richmond & McCroskey, 2000).

Also, studies that relate non-verbal immediacy, or even non-verbal communication, are virtually directed towards charismatic leadership style (Bellou & Gkorezis, 2016; Darioly & Mast, 2013). Studies only mention the relation of non-verbal immediacy or elements of non-verbal communication that represent immediate non-verbal behaviors with this leadership style (e.g. Bolkan & Goodboy, 2011; Bonaccio et al., 2016; Cherulnik et al., 2001), not mentioning other leadership styles, such as transactional or avoidance leadership.

### **Current Research and Hypotheses**

The general purpose of this study is to verify the mediating effects of non-verbal immediacy between leadership styles and satisfaction with the leader. Based on the previous studies, it is expected that perceptions of transformational and transactional leadership will be positively associated with non-verbal immediacy (Hypothesis 1 and 2, respectively) and with employee satisfaction with the leader (Hypothesis 3 and 4, respectively); avoidant leadership will be negatively related with non-verbal immediacy (Hypothesis 5) and with employee satisfaction with the leader (Hypothesis 6). Furthermore, it is hypothesized that non-verbal immediacy will be related with satisfaction with the leader (Hypothesis 7). As a result of these links, it is expected that non-verbal immediacy could mediate the relationships between leadership styles (i.e., transformational, transactional and avoidant leadership) and satisfaction with the leader (Hypothesis 8). Finally, following suggestions of moderate effects of time of contact between supervisor and subordinate on perceptions of leadership behaviours (Fan & Han, 2018; Gkorezis, 2015) and satisfaction (Gerstner & Day, 1997; Volmer et al., 2011), another aim of this study is to understand how time of supervisor-subordinate relationship (Hypothesis 9) moderate the relationships estimated in the hypothesized model. The detailed hypothesized model is presented in Figure 1.



*Figure 1.* The hypothesised model about the relationships between leadership styles, non-verbal immediacy and employees' satisfaction with the leader. *Note.* Positive links in continuous lines and negative paths in dashed lines.

## METHOD

### Participants and Procedure

A total of 296 Portuguese employees (F = 135, M = 160) in the areas of industry ( $n = 114$ ), real estate ( $n = 115$ ) and civil construction ( $n = 62$ ), participated in the current study. Employees' age ranged from 20 to 61 years old ( $M_{\text{age}} = 36,0$ ); 4% of them had basic education, 12% completed lower secondary education, 25% upper secondary education, 39% had an undergraduate degree, 18% had a master's degree, and 2% achieved PhD degree. The employees had about 6 years ( $M = 6.01$ ,  $SD = 8.05$ ) of activity in the present company and reported an average of 3.73 years ( $SD = 5.66$ ) of contact with their current immediate supervisor.

Participants were recruited through the *LinkedIn* social network. The method used to construct the questionnaire and collect information was completed through the internet using Google Docs.com. The dissemination of the questionnaire was accomplished by sending the respective link of the questionnaire and individual requests for participation using the *LinkedIn*, indicating that this study is focused in active employees who are directly supervised by a superior. 1.363 individual messages were sent, and 296 people answered (23% agreed to participate). The participation request was composed of a small message that included a link to the questionnaire and the purpose of the study. The message also ensured the confidentiality and anonymity of the responses. Employees were informed that the participation was voluntary and that they could withdraw at any time from the study.

### Measures

**Leadership styles.** A Portuguese version (Azevedo & Carvalho, 2004) of the Bass and Avolio's Multifactor Leadership Questionnaire (2004; MLQ 5X - Short) was used to assess employees' perceptions of leadership styles. The MLQ 5X consists of 36 items answered in a 5-point Likert response scale (0 = never, 4 = always). Participants were

asked to indicate how frequently each statement fits the style of their immediate supervisor. Higher scores indicate a greater use of a leadership style.

In this study, as similar with other studies conducted with the MLQ 5X (e.g., Alonso, Saboya, & Guirado, 2010; Antonakis et al., 2003; Castanheira & Costa, 2007), it was considered a three-factor structure for leadership styles. The first factor comprises five components of the transformational leadership, such as idealized attributes (e.g., “Instils pride in me for being associated with him/her”;  $\alpha = .88$ ), idealized behaviour (e.g., “Talks about his/her most important values and beliefs”;  $\alpha = .81$ ), inspirational motivation (e.g., “Talks optimistically about the future”;  $\alpha = .93$ ), intellectual stimulation (e.g., “Re-examines critical assumptions to question whether they are appropriate”;  $\alpha = .86$ ), and individualize consideration (e.g., “Spends time teaching and coaching”;  $\alpha = .87$ ). The second factor included active transactional leadership in the form of contingent reward (e.g., “Provides me with assistance in exchange for my efforts”;  $\alpha = .84$ ) and active management-by-exception (e.g., “Focuses attention on irregularities, mistakes, exceptions, and deviations from standards”;  $\alpha = .69$ ). The third factor consists of items that tap into avoidant leadership that is passive in correcting mistakes (e.g., “Fails to interfere until problems become serious”;  $\alpha = .66$ ) and *laissez-faire* (e.g., “Avoids getting involved when important issues arise”;  $\alpha = .74$ ).

**Non-verbal immediacy.** The Non-verbal Immediacy Scale-Self Report (NIS; Richmond, McCroskey & Johnson, 2003) was used to examine employees' perceptions of the non-verbal behaviours of their immediate supervisor. The NIS is composed by 26 items scored using a 5-point Likert-type response format, and the degree of agreement is from (1) “rarely” to (5) “very often”. Thirteen of these items are positively worded (1, 2, 6, 10, 12, 13, 14, 16, 17, 19, 21, 22, and 25) and the rest thirteen are worded negatively (3, 4, 5, 7, 8, 9, 11, 15, 18, 20, 23, 24, and 26). In the current study, this scale showed a Cronbach  $\alpha$  coefficient of .88.

**Satisfaction with the leader.** The employees' satisfaction with the amount of support and guidance received from their immediate supervisor was examined using the

satisfaction with the leader scale from the Job Satisfaction Questionnaire (Pais-Ribeiro, 2002). This scale consisted of three items (e.g., “My immediate supervisor gives me all the support I need”) answered in a 5-point Likert response scale (0 = totally disagree, 5 = totally agree). Cronbach  $\alpha$  coefficient in this study was .93.

### **Data analysis**

A two-step procedure via structural equation analysis using AMOS 23 were performed to examine the hypothesized model (Kline, 2011). Firstly, the measurement model was tested through confirmatory factor analysis (CFA) to estimate the extent to each variable was represented by its indicators. Secondly, the structural model was examined. The maximum likelihood was used as the estimation method. Overall model fit was evaluated according to Hu and Bentler (1999), with root-mean-square error of approximation (RMSEA)  $\leq 0.06$ , Comparative Fit Index (CFI)  $\geq 0.95$ , Tucker-Lewis Index (TLI)  $\geq 0.95$ , and standardized root-mean-square residual (SRMR)  $\leq 0.08$  indicating a good fit.

Also, the direct and indirect effects of the variables in this study on the outcome variable were assessed. Specifically, leadership styles variables were conceptualized to have an indirect association with employees’ satisfaction with the leader, and non-verbal immediacy was considered as mediator. Bootstrap resampling procedure (1,000 bootstrap samples) with 95% bias corrected confidence intervals (CI) was used to test the significance of the direct and indirect effects. An indirect effect is considered significant (at  $\leq 0.05$ ) if its 95% CI does not include zero (Williams & MacKinnon, 2008). Effect size values of 0.1, 0.3, and 0.5 were considered small, medium, and large, respectively (Cohen, 1988).

Potential variations on the links estimated in the hypothesized model as a function of the moderating influence of the time of supervisor-subordinate relationship were also evaluated. Hence, a multigroup analyses was conducted to discern the extent to which the time of supervisor-subordinate relationship moderate the path coefficients estimated in hypothesized models. Differences between models were accessed with chi-

square ( $\chi^2$ ) tests of significance and CFI difference ( $\Delta$ CFI) values (Cheung & Rensvold, 2002). Between-group differences was further assessed by sequentially examining the unconstrained and the constrained structural paths. The significance of the structural paths was assessed using critical ratio for differences produced by AMOS (significance  $\geq 1.96$ ).

## RESULTS

An initial inspection of the data exposed that missing values covered 3.3% of cells in the data, without fixed pattern. Thus, missing data were imputed using AMOS's regression procedure. Mardia's coefficient (58.12) surpassed the limit values for the multivariate normality (Kline, 2011). Hence, a Bollen-Stine bootstrap was used for subsequent analysis (Nevitt & Hancock, 2001). As well, variance inflation factors (VIF) were assessed to verify collinearity within all study variables, with values ranging from 1.15 (avoidant leadership) to 1.84 (transactional leadership), showing acceptable conditions to conduct regression analysis (VIF < 10; Kline, 2011).

Means, standard deviations and bivariate correlations were computed for all variables (Table 1). Employees revealed moderate perceptions of transformational ( $M = 2.08$ ,  $SD = 0.98$ ) and transactional ( $M = 1.99$ ,  $SD = 0.78$ ) leadership styles and low levels of avoidant leadership ( $M = 1.30$ ,  $SD = 0.68$ ) from their immediate supervisor (range 0–4). Regarding non-verbal immediacy and satisfaction with the leader, employees perceived a mean of 3.51 ( $SD = 0.55$ ) non-verbal behaviours and reported moderate levels of satisfaction with the amount of support received from their immediate supervisor ( $M = 3.23$ ,  $SD = 1.46$ ). The correlation matrix showed significant correlations among all the study variables, with the exception for the relationship between transformational and avoidant leadership ( $r = -.07$ ,  $p > .05$ ).

Table 1

*Descriptive statistics and bivariate correlations for all variables.*

	1	2	3	4	5
1. Transformational leadership	-				
2. Transactional leadership	.62**	-			
3. Avoidant leadership	-.13*	-.07	-		
4. Non-verbal immediacy	.33**	.43**	-.34**	-	
5. Satisfaction with the leader	.34**	.49**	-.39**	.62**	-
<i>M</i>	2.08	1.99	1.30	3.51	3.23
<i>SD</i>	0.98	0.78	0.68	0.55	1.46
<i>Range</i>	0-4	0-4	0-4	1-5	1-5

## Measurement model

Initially, it was considered a model constituted by six latent variables of leadership originally suggested by Bass (1985) – i.e., four transformational/transactional leadership factors (i.e., idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration), one corrective leadership factor (i.e., management-by-exception) and one passive/avoidant leadership factor (laissez-faire) – with non-verbal immediacy (observed variable) and satisfaction with the leader (latent variable). However, this model showed problems with inflated measurement errors and extreme collinearity due to high correlations among the leadership variables. High correlations between leadership variables is one of the main criticisms of researchers using MLQ (e.g., see Judge & Piccolo, 2004, for more references).

Several alternative models have been suggested in the literature for the MLQ 5X (e.g., Avolio & Bass, 2004). Consequently, it was examined an alternative three-factor model for leadership also tested by Avolio and Bass (2004), composed by transformational (i.e., idealized influence, inspirational motivation, intellectual stimulation and individualized consideration), transactional (i.e., contingent reward and active management-by-exception), and avoidant leadership (i.e., passive management-by-exception and laissez-faire), with non-verbal immediacy (observed variable) and satisfaction with the leader (latent variable). All factor loadings for the indicators of the latent variables were significant ( $p < .001$ ), suggesting that all the latent variables were represented by their respective indicators. The measurement model revealed an appropriate data fit [ $\chi^2/df = 75.73 (17)$ ,  $p < .001$ , TLI = .95, CFI = .96, SRMR = .05, and RMSEA = .11, 95% CI (.09, .13)].

## Structural model

The hypothesised model revealed a good fit to the data [ $\chi^2/df = 151.05 (56)$ ,  $p < .001$ , TLI = .95, CFI = .96, SRMR = .05, and RMSEA = .09, 95% CI (.08, .11)]. The standardized direct effects for the model are presented in Figure 2. As expected, transformational ( $\beta = 0.20$ , CI = 0.04, 0.28) and transactional ( $\beta = 0.23$ , CI = 0.07, 0.31) leadership styles were associated with non-verbal immediacy and with employees' satisfaction with the leader ( $\beta = 0.58$ , CI = 0.08, 0.42,  $\beta = 0.52$ , CI = 0.06, 0.36, respectively); avoidant leadership was negatively related with non-verbal immediacy ( $\beta = -0.21$ , CI = -0.39, -0.03) and with employees' satisfaction with the leader ( $\beta = -0.27$ , CI = -0.47, -0.05). Furthermore, non-verbal immediacy was related with employees' satisfaction with the leader ( $\beta = 0.28$ , CI = 0.06, 0.36).

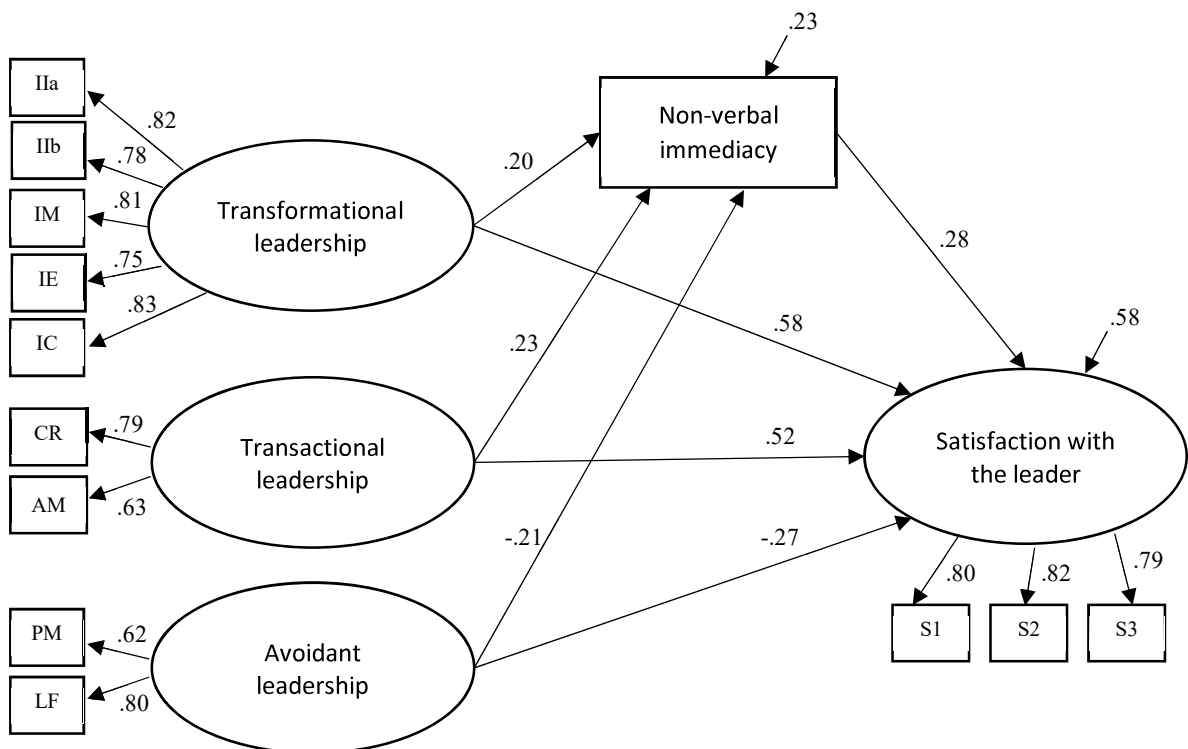


Figure 2. The path model. Note. All the standardised path coefficients are significant at the .05 level. Ila = idealized influence attributes, I Ib = idealized influence behaviours, IM = inspirational motivation, IE = intellectual stimulation, IC = individualized consideration, CR = contingent rewards, AM = active management-by-exception, PM = passive management-by-exception, LF = laissez-faire.

Results of the mediation analysis between leadership styles, non-verbal immediacy, and employees' satisfaction with the leader are displayed in Table 2. Transformational, transactional and avoidant leadership styles showed significant indirect effects on employees' satisfaction with the leader via non-verbal immediacy ( $\beta = 0.16$ , 95% CI [0.09, 0.26];  $\beta = 0.14$ , 95% CI [0.06, 0.22];  $\beta = -0.10$ , 95% CI [-0.20, -0.02], respectively).

Table 2

*Standardised indirect effects and confidence intervals*

Mediating paths	Estimate	95% CI	
		Lower	Upper
Transformational → Non-verbal immediacy → Satisfaction	.16	.09	.26
Transactional → Non-verbal immediacy → Satisfaction	.14	.06	.22
Avoidant → Non-verbal immediacy → Satisfaction	-.10	-.20	-.02

*Note.* 95% confidence intervals (CI) do not include zero for indirect effect significance.

### **Moderating effects of the years of supervisor-subordinate relationship**

A multigroup confirmatory analyses was performed to assess whether the path coefficients differed significantly between employees with more and less years of relationship with the supervisor. The number of years of contact with their current immediate supervisor was recoded according to the median (2 years) in two groups: (1) less ( $n = 171$ ) and (2) more ( $n = 125$ ) years of relationship with the supervisor. The fit of both unconstrained ( $\chi^2/df = 556.83$  (112),  $p < .001$ , TLI = .88, CFI = .90, SRMR = .04, RMSEA = .09; 95% CI [.07, .09]) and constrained structural paths ( $\chi^2/df = 577.03$  (127),  $p < .001$ , TLI = .89, CFI = .90, SRMR = .05, RMSEA = .09; 95% CI [.05, .06]) models was tolerable. The  $\chi^2$  statistic indicated that these models were invariant [ $\Delta\chi^2(11) = 6.15$ ,  $p > .05$ ], whereas the critical ratios for differences between structural paths revealed that two hypothesized relationships differed significantly between groups. The paths from

transformational leadership to non-verbal immediacy ( $Z = 2.63, p < .05$ ), and from non-verbal immediacy to employees' satisfaction with the leader ( $Z = 2.52, p < .05$ ) evidenced significant differences. Both paths coefficients for employees with more years of relationship with the supervisor ( $\beta = 0.26, p < .01; \beta = 0.31, p < .01$ , respectively) were greater than the coefficients for employees with less years of relationship with the supervisor ( $\beta = 0.14, p < .01; \beta = 0.16, p < .05$ , respectively).

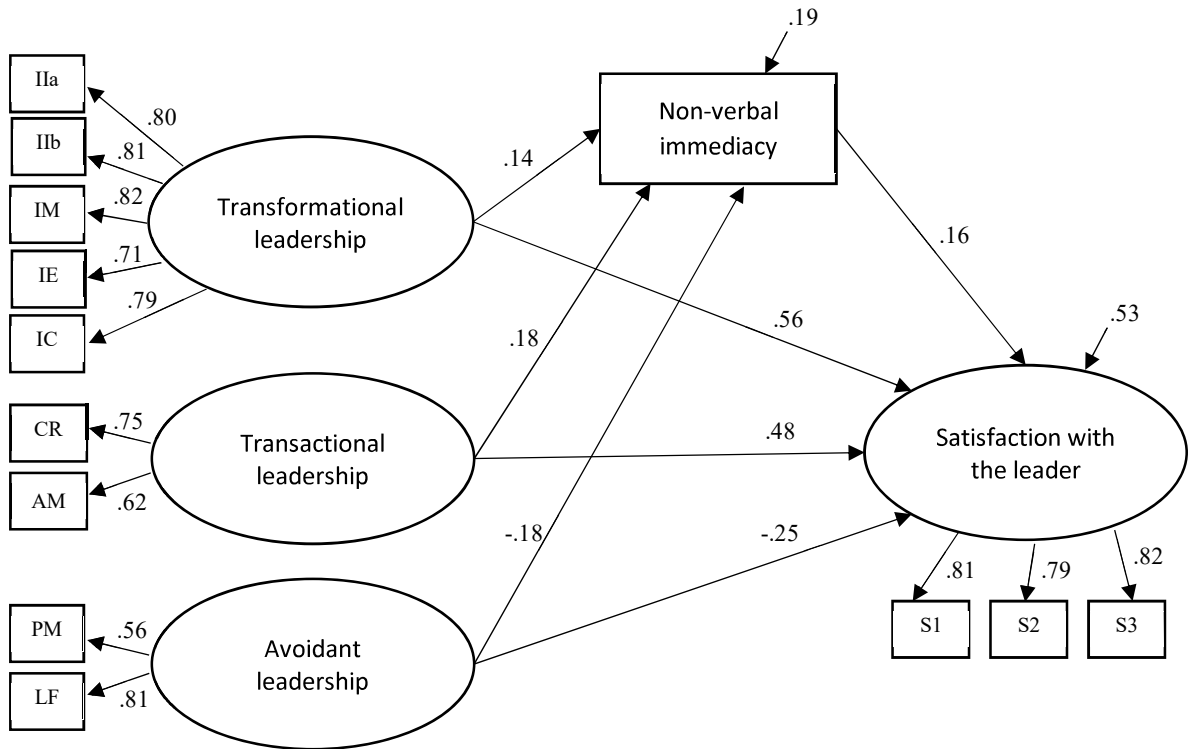


Figure 3. The path model for less years of relationship with the supervisor. Note. All the standardised path coefficients are significant at the .05 level. IIa = idealized influence attributes, IIb = idealized influence behaviours, IM = inspirational motivation, IE = intellectual stimulation, IC = individualized consideration, CR = contingent rewards, AM = active management-by-exception, PM = passive management-by-exception, LF = laissez-faire.

Specifically, the structural model for less years of relationship with the supervisor revealed an acceptable fit [ $\chi^2/df = 201.16 (104), p < .001, TLI = .90, CFI = .90, SRMR = .06$ , and  $RMSEA = .09, 95\% CI (.08, .10)$ ]. The standardized direct effects for this model are presented in Figure 3. Accordingly, transformational ( $\beta = 0.14, p < .01$ ) and transactional ( $\beta = 0.18, CI = 0.04, 0.26$ ) leadership styles were associated with non-verbal immediacy and with employees' satisfaction with the leader ( $\beta = 0.56, p < .01, \beta = 0.48$ ,

$p < .01$ , respectively); avoidant leadership was negatively related with non-verbal immediacy ( $\beta = -0.18$ ,  $p < .05$ ) and with employees' satisfaction with the leader ( $\beta = -0.25$ ,  $p < .01$ ). Furthermore, non-verbal immediacy was related with employees' satisfaction with the leader ( $\beta = 0.16$ ,  $p < .05$ ).

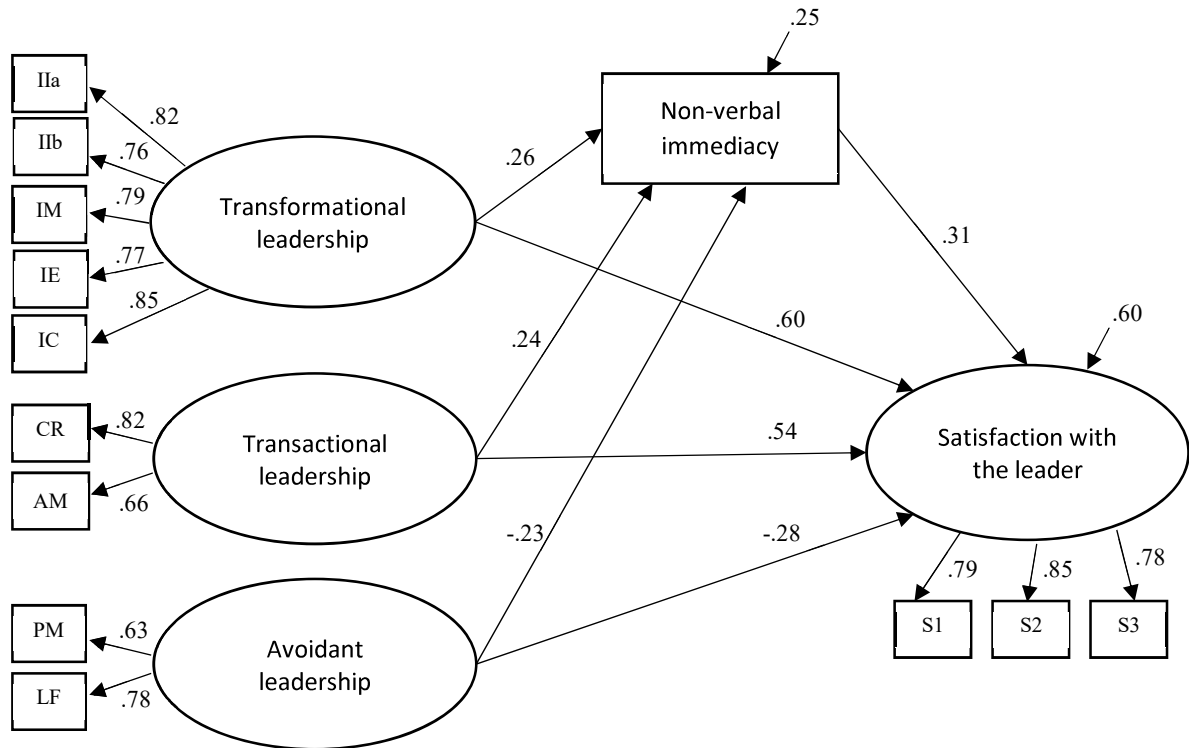


Figure 4. The path model for more years of relationship with the supervisor. Note. All the standardised path coefficients are significant at the .05 level. IIa = idealized influence attributes, IIb = idealized influence behaviours, IM = inspirational motivation, IE = intellectual stimulation, IC = individualized consideration, CR = contingent rewards, AM = active management-by-exception, PM = passive management-by-exception, LF = laissez-faire.

The structural model for more years of relationship with the supervisor revealed an acceptable fit [ $\chi^2/df = 189.86$  (104),  $p < .001$ , TLI = .91, CFI = .90, SRMR = .05, and RMSEA = .08, 95% CI (.07, .08)]. The standardized direct effects for this model are presented in Figure 4. Similarly to the model less years of relationship with the supervisor, transformational ( $\beta = 0.26$ ,  $p < .01$ ) and transactional ( $\beta = 0.24$ ,  $p < .01$ ) leadership styles were associated with non-verbal immediacy and with employees' satisfaction with the leader ( $\beta = 0.60$ ,  $p < .01$ ,  $\beta = 0.54$ ,  $p < .01$ , respectively); avoidant leadership was negatively related with non-verbal immediacy ( $\beta = -0.23$ ,  $p < .05$ ) and

with employees' satisfaction with the leader ( $\beta = -0.28, p < .01$ ). Furthermore, non-verbal immediacy was related with employees' satisfaction with the leader ( $\beta = 0.31, p < .01$ ).

## DISCUSSION

The general purpose of this study was to examine the mediating effects of non-verbal immediacy on the relationships between leadership styles and employees' satisfaction with the leader. All hypothesized relationships were confirmed. Specifically, transformational leadership was positively associated with non-verbal immediacy (Hypothesis 1). The literature shows consistently the positive association between the two variables (e.g., Bolkan & Goodboy, 2011). Researchers evidenced relationships between transformational leadership with perceptions of non-verbal immediacy, such as perceptions of visual contact, gestures, and facial expressions (Riggo & Feldman, 2005).

Consistent with previous studies (e.g., Jia et al., 2017; Richmond & McCroskey, 2000), transactional leadership was positively associated with non-verbal immediacy (Hypothesis 2). It is important to note that other studies showed disparate results (i.e., Howell & HallSnack 1999; Antonakis & Atwater, 2002; Howell et al., 2005; Podsakoff, Todor, Grover, & Huber, 1984). This result reinforces the argument that proximity may be a key variable in understanding the link between non-verbal immediacy and transactional leadership style. Future studies could examine the associations between these variables in more detail by analyzing moderating effects of supervisor-subordinate proximity, such as physical proximity, perception of social proximity and frequency of interaction perceived by employees (Antonakis & Atwater, 2002; Howell et al., 2005; Podsakoff et al., 1984).

Another finding of the present study consistent with the literature was the relationship between transformational leadership and employee satisfaction with the leader (Hypothesis 3) (e.g., Barling, Weber, & Kelloway, 1996; Bass, 1985; Ertureten et al., 2013; Girma, 2016). Furthermore, this leadership style was considered one of the most important indicators of professional satisfaction (Piccolo et al., 2012). In this study, the link between these two variables was the strongest association identified in the path model ( $\beta = .58, p < .05$ ). High levels of transformational leadership implies an intense

emotional component exhibited by the leader, enhancing the quality of the relationship between leader and employees (Bass, 1985; Cheng, Yen, & Chen, 2012).

In addition, transactional leadership was positively associated with employee satisfaction with the leader (Hypothesis 4). Researchers have achieved conflicting results regarding this association (cf., Dumdum et al., 2002; Voon et al., 2011). There are authors who consider transactional leadership an indicator of professional satisfaction (e.g., Bennett, 2009; Zareen et al., 2015), whereas other authors do not find significant associations among the variables in their studies (e.g., Bolkan & Goodboy, 2011; Erkutlu, 2008; Voon et al., 2011). Specifically, the sub-dimension of active management by exception of transactional leadership seems to contribute to ambiguous results in the relationship with job satisfaction (e.g., Skogstad et al., 2014a, 2014b; Solà et al., 2016). However, due to problems with inflated measurement errors and extreme collinearity, sub-dimensions of leadership styles were considered as second-order variables in this study, which did not allow identification of relationships between these variables and professional satisfaction in the path model. Future research should consider testing other alternative models of leadership styles (see Avolio & Bass, 2004, for more information) to assess the relationships evidenced in the present study.

Avoidant leadership was negatively related with non-verbal immediacy (Hypothesis 5). A possible explanation for this finding may be associated to the distance of the leader in relation to the employee typical of this avoidant style of leadership, resulting in a decrease of interactions and the lack of quality of the relationship between leader and employee (Antonakis & Atwater, 2002; Howell & Hall-Merenda, 1999). In this sense, leaders should be aware that when they perform avoidance leadership, they will be more likely to have greater distance in their relations with their employees, which represents the inverse of the concept of non-verbal immediacy (Jia et al., 2017; Richmond & McCroskey, 2000).

Also, avoidant leadership was negatively associated with employee satisfaction with the leader (Hypothesis 6). This finding is in line with the literature that evidenced negative (e.g., DeRue et al., 2011) or no associations among these variables (e.g., Dumdum et al., 2002; Solà et al., 2016; Voon et al., 2011). Avoidant leaders do not have

a positive interaction with employees, and there are no potential rewards inherent to the relationship (e.g., Skogstad et al., 2014b).

Non-verbal immediacy was related with employee satisfaction with the leader (Hypothesis 7). According to literature, satisfaction of employees is based on their perception of the quality of the relationship with their leader, which is determined by the characteristics of leaders' non-verbal immediacy (Teven, 2010; Witos, 2015). Positive associations between professional satisfaction and non-verbal immediacy were recently evidenced (e.g., Jia et al., 2017), demonstrating that employees showed higher levels of satisfaction when the leader performed behaviors of non-verbal immediacy (Jia et al., 2017; Teven, 2007).

In addition, the present results expand current knowledge by demonstrating small-to-moderate mediating effects of non-verbal immediacy on the link between leadership styles (i.e., transformational, transactional and avoidant leadership) and employee satisfaction with the leader. As noted above, employees who perceive more transformational and transactional leadership behaviors, and less avoidant leadership, perceive more frequently non-verbal immediacy behaviors from their leader (e.g., Bolkan & Goodboy, 2011; Hansbrough, 2012; Howell et al., 2005). In turn, perceptions of leaders' non-verbal immediacy behaviors are associated with more employees' satisfaction with the leader (e.g., Teven, 2007; Witos, 2015). In other words, the mediating effects of non-verbal immediacy may suggest that when employees perceive their supervisors as persons who are role models, share their vision, stimulate creativity and innovation, foster a supportive environment around them, and also provide rewards and recognition according to their immediate needs, are thus more likely to perceive supervisors' nonverbal immediacy behaviors (i.e., gestures, visual contact, smiles, physical contact, relaxed body posture, physical proximity, or using speech in an animated manner), and as a consequence, they will feel more satisfied with the support received by the supervisor. Despite the results of the present study, more research is needed to understand the role of non-verbal immediacy and its relationship with other variables at organizational level, such as commitment, motivation and turnover (Bellou & Gkorezis, 2016; Schyns & Mohr, 2004).

The results regarding moderating effects of time of supervisor-subordinate relationship show that the path model was invariant across those with less or more than two years of relationship (Hypothesis 9). However, an analysis of the structural paths revealed that two paths coefficients for employees with more years of relationship with the supervisor (i.e., transformational leadership → non-verbal immediacy → employees' satisfaction with the leader) were greater than the coefficients for employees with less years of relationship with the supervisor. This finding supports the view that leadership styles and non-verbal immediacy processes may vary depending on the closeness between leader and employee (e.g., Volmer et al., 2011), and to the best of our knowledge the present study is the first to address the effects of the time of supervisor-subordinate relationship on the relationships between leadership styles, non-verbal immediacy, and satisfaction with the leader.

### **Limitations and future research**

Limitations and future research should be considered for this study. First, the present study has a cross-sectional design which make impossible any causal interpretation of path coefficients effects. Longitudinal research that addresses processual effects over time would add to our understanding of how leadership styles, non-verbal immediacy, and satisfaction with the leader reciprocally impact each other. The assessment of perceptions of leaders' non-verbal immediacy using paper-and-pencil questionnaire may not adequately reflect the non-verbal communication structure. Future research should include other type of assessment (e.g., in-situ observations, interviews) that can capture other dimensions of leaders' non-verbal immediacy. In addition, evidence suggests that personality traits have the potential to influence leadership styles. For example, the Big Five personality traits have been shown to predict transformational leadership (e.g., Bono & Judge, 2004). As studies in organizational context are still scarce, researchers should consider personality traits to understand the links between leadership styles, non-verbal immediacy, and satisfaction with the leader. Moreover, leaders change their leadership style with experience (Mumford, Zaccaro,

Harding, Jacobs, & Fleishman, 2000); hence, future research should explore how leaders' non-verbal immediacy change as a function of exposure with their employees. Finally, this study assessed only the leaders' non-verbal immediacy. It would be interesting for future studies to extend the analysis to verbal behaviors. Also, future research should consider relationships between supervision positions and non-verbal behaviours, and also differences between genders. According to Johnson (1994), patterns of conversation may vary depending on the gender of the interactants and the norms of the group context, it could be also considered the effect of the gender composition of the group. Another interesting factor to be considered in a future research could be the evolution of E-Leadership since it would be relevant to verificate how the emerge of global technology might impact how leadership is practiced and investigated (Avolio, Sosik, Kahai, & Baker (2014).

## **Conclusions**

In summary, according to the results obtained, it is possible to develop several conclusions, taking into consideration the starting point of this study, i.e., does the perceptions of leaders' non-verbal immediacy mediates the relationship between the leadership styles and satisfaction with the leader?

The main conclusions to be drawn from this study relate to the fact that it is possible to understand that leaders who use transformational and transactional leadership styles will be able to increase the level of satisfaction of their employees, as well as it is possible to conclude that these leaders are prone to greater use of non-verbal immediacy behaviors. Conversely, leaders who decide to use avoidance leadership have adversely influenced employees' satisfaction with the leader, also to gauge that these leaders will not present high non-verbal immediacy behaviors. Additionally, findings from this study suggest that the time of the relationship between leader and employee positively influences the satisfaction with leadership. It is also possible to indicate that the purpose of this study was verified, to the extent that it is likely to conclude that leaders' non-verbal immediacy mediates the relationship

between the perception of leadership styles and the satisfaction with the leader, i.e., the leadership style used by the leader and the satisfaction that the employee feels about leadership is influenced by the use of non-verbal immediate behaviors by the leader. Finally, the present study may have as practical implications the fact that the results obtained can offer information to organizations that allow leaders to adapt their non-verbal immediate behavior, and their leadership style, to increase the employees' satisfaction their leadership.

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