

# MASTER MANAGEMENT (MIM)

### **MASTER'S FINAL WORK**

### DISSERTATION

PERCEPTION OF LEADER'S SENSE OF HUMOR, COMMUNICATION OPENNESS, AND WORK ENGAGEMENT: ANALYSIS IN A PORTUGUESE ORGANIZATIONAL CONTEXT

LEONOR PATRÍCIO VAN OLFFEN

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#### ABSTRACT

Recently, there has been a growing recognition of the importance of humor in organizational setting, where it may potentially enhance management effectiveness. This study aims to analyse the impact of employees' perceptions regarding their leader's sense of humor on two relevant organizational variables: communication openness, and employee work engagement. The study follows a multidimensional conceptualization of humor, including four dimensions: humor production and social uses of humor, coping/ adaptive humor, appreciation of humor, and attitudes towards humor.

Trough an online questionnaire survey, a sample of 170 individuals was gathered. The results suggest that in general, respondents have a positive perception towards their leader's sense of humor, believe they have an open communication environment, and feel engaged in their work. However, significant differences were found within the sample for work engagement. Participants who are younger, single, do not have a permanent contract, are in the organization for less than a year, and do not have a managerial role, have significantly lower means. Significant differences are also found in the dimension of attitudes towards humor, where individuals with a level of education up to the 12<sup>th</sup> year present a significantly lower mean.

Using the Structural Equations Modelling, the results indicate the existence of a positive association between the perception of leader's sense of humor and communication openness, as well as between that perception and work engagement. Communication openness is also positively associated with work engagement and plays a mediating role between leader's sense of humor and work engagement. However, in all relationships under study, only one dimension of sense of humor - humor production and social uses of humor - entailed significant associations. Nevertheless, the proposed model research allows to explain 25,1% of the variance for work engagement and 14% of the variance for communication openness.

**Keywords:** Humor; Sense of Humor; Leader's Sense of Humor; Communication Openness; Work Engagement.

#### RESUMO

Recentemente, tem surgido um crescimento no reconhecimento da importância do humor em contexto organizacional, uma vez que este pode aumentar potencialmente a eficácia da gestão das organizações. Deste modo, o estudo tem como objetivo analisar o impacto da perceção dos trabalhadores relativamente ao sentido de humor do líder em duas variáveis organizacionais relevantes: abertura à comunicação e *work engagement*. O estudo baseia-se numa conceptualização multidimensional do humor, que inclui quatro dimensões: a produção de humor e usos sociais do humor, humor adaptativo, apreciação do humor, e atitudes relativamente ao humor.

Com base num inquérito por questionário *online*, obteve-se uma amostra de 170 indivíduos. Os resultados sugerem que, em geral, os inquiridos têm uma perceção positiva relativamente ao sentido de humor dos seus líderes, acreditam que têm um ambiente de comunicação aberto, e sentem-se empenhados no seu trabalho. No entanto, foram encontradas diferenças significativas relativas ao *work engagement*. Os inquiridos mais jovens, solteiros, sem contrato permanente, que trabalham na organização há menos de um ano, e que não desempenham funções de chefia, apresentam médias relativamente mais baixas. Adicionalmente, também se verificaram diferenças significativas na dimensão "atitudes relativamente ao humor", onde indivíduos com um nível de escolaridade completo até ao 12º ano, apresentam uma média significativamente inferior.

Recorrendo ao Modelo de Equações Estruturais, os resultados indicam a existência de uma associação positiva entre a perceção do sentido de humor do líder e a abertura à comunicação, bem como entre essa mesma perceção e o *work engagement*. A abertura à comunicação está também positivamente associada ao *work engagement*, e desempenha um papel mediador entre o sentido de humor do líder e o *work engagement*. Contudo, em todas as relações em estudo, apenas uma dimensão do sentido de humor - a produção de humor e usos sociais do humor - apresentou associações positivas. Assim sendo, o modelo conceptual proposto permite explicar 25,1% da variância do *work engagement*, e 14% da variância da abertura à comunicação.

**Palavras-chave:** Humor; Sentido de Humor; Sentido de Humor do Líder; Abertura à Comunicação; *Work Engagement*.

#### ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to ISEG - Lisbon School of Economics & Management, for providing me with the opportunity to pursue my academic goals, resources and support they have offered throughout my journey.

Special thanks are extended to my supervisor, professor Maria Eduarda Soares, for her guidance, expertise, and inspiration. Her insightful feedback has been invaluable in shaping this work.

I am profoundly grateful to my family, especially my mom and grandmother, for their unconditional love, endless patience, and unwavering belief in my abilities. Their support has been the foundation upon which I have built my academic journey.

I would also like to thank my friends for their constant encouragement, understanding, and for being a source of motivation during challenging times. Their friendship has certainly made this chapter of my life more fulfilling.

Lastly, I extend my appreciation to all those who have directly or indirectly contributed to this thesis, who were instrumental for the development of this project.

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#### **1. INTRODUCTION**

Humor has been considered a central and common element in individual's lives, and given its benefits in terms of well-being and ability to cope with difficult situations, has been the subject of several empirical research (Mesmer-Magnus et al., 2012). However, the use of organizational humor has also been gaining its importance, as it is able to offer valuable benefits regarding the motivation of employees, effective communication and reduction of conflicts, leading to better organizational outcomes (Romero & Cruthirds, 2006). Previous studies have shown evidence that humor, especially leader's humor has clear effects on the outcomes of an organization, whether in terms of organizational behaviour (Rosenberg et al., 2021), or performance of teams (Unal, 2014), as employees see it as an valuable asset.

By acknowledging the Social Exchange Theory (Cropanzano & Mitchell, 2005) that relies on social exchanges, and the Social Information Processing Theory (Salancik & Pfeffer, 1978) based on the response to social cues, we can posit how leader's sense of humor can have an influence on elevating the levels of work engagement and communication openness. As Tan et al. (2020) research suggests, when employees have a humorous leader, they tend to be more engaged, as they see a more supportive organization. On the same level, organizations who have leader's with sense of humor, believe they have a tool for a more open to communication environment, as it creates an open atmosphere in the organization (Romero & Cruthirds, 2006).

The present study also aims to contribute to the development of the Job Demands and Resources Model of Bakker and Demerouti (2007). According to this model, every job depends on the existence of demands and resources. Job demands, are defined as "aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Demerouti et al., 2001, p. 501). Job resources, are related to those "physical, social, or organizational aspects of the job that may: reduce job demands and the associated psychological costs; be functional in achieving work goals; and stimulate personal growth, learning, and development" (Bakker & Demerouti, 2008, p.211).

The JD-R model posits that job resources are fundamental for the development of employee engagement, a crucial element in today's organizational context, as it impacts

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the performance and well-being of individuals (Zahari & Kaliannan, 2023), as well as the success of organizational outcomes (Salanova et al., 2005). Studying employee engagement thus may contribute to the Sustainable Development Goals (SDG) of the United Nations, namely SDG 3 - Good Health and Well-Being, and SDG 8 - Decent Work and Economic Growth (United Nations, n.d).

Several resources have been identified as having an impact on work engagement, including social resources (e.g., leader's support), work resources (e.g., task variety), organizational resources (e.g., communication), and development resources (e.g., possibilities for learning and development) (Schaufeli, 2017). In this study, we will include two more resources which have been under-researched. For social resources, we will analyse leader's sense of humor, as an aspect of leader support. For organizational resources, we will analyse communication openness, as an aspect of organizational communication.

Therefore, the present study aims to explore in the Portuguese organizational context, whether how perceptions of leader's sense of humor and perceptions of communication openness can influence the levels of work engagement of employees. Therefore, the main objectives are defined as:

- Analyse the employee's perceptions levels regarding their leader's sense of humor, communication openness, and employee work engagement in a sample of employees in the Portuguese organizational context.
- Analyse whether there are significant differences in the variables under study, in different groups of the sample (e.g., gender, age, marital status, level of education).
- Analyse the relationships established among the perception of leader's sense of humor, communication openness, and work engagement.

Consistent with the presented objectives, this dissertation is divided into four chapters. The first chapter corresponds to the introduction, in which are presented the theme and main objectives of the study, followed by the second chapter, the literature review, where concepts under study are developed, along with the linkages made between them. In the third chapter the empirical study will be presented, including the method's description, characterization of the sample, instruments, and the study's findings. Finally, the fourth chapter includes the main conclusions, such as the summary of results, contributions to the study, limitations found, and suggestions to future research.

#### **2. LITERATURE REVIEW**

The main purpose of this chapter relies on presenting and exploring the concepts in study in a brief literature review, namely humor, communication openness, and work engagement. At the end, studies demonstrating the relations established between the concepts, serving as justification for the hypotheses formulated and the research model developed, will also be presented.

#### 2.1. Humor

#### 2.1.1 Definition

A consensual definition of humor does not exist since there are several definitions expressing very different aspects of humor, which makes it so difficult to define and operationalize. Nevertheless, humor may be defined as a way to express feelings (Graham et al., 1992) and permit means to disclose stressful ideas in a way that can be less distressing (R. A. Martin & Lefcourt, 1983).

The definitions of "humor" and "sense of humor" are often used interchangeably, but others distinguish them from humor as a state, to humor as a trait (sense of humor) (Martin, 2000; Martin et al., 2003; as cited in Mathies et al., 2016), thus, it turns tough to define sense of humor without simultaneously defining humor itself.

Consequently, in terms of sense of humor, it is agreed that it has several but unique manifestations, so it can be described as a "personality trait that enables a person to recognize and use successful humor as a coping mechanism and/or for social/affiliative communications/ interactions" (Mesmer-Magnus et al., 2012, p. 158).

Moreover, in order to have sense of humor, individuals need psychological and social skills, which means that sense of humor, is a specific form of humor an individual has (Mathies et al., 2016). To conceptualize this, Thorson and Powell (1993) define sense of humor as "a way of looking at the world; it is a style, a means of self-protection and getting along" (p.13), and define six fundamental elements of an individual sense of humor, such as recognition of the self as humorous, recognition of other's humor, humorous outlook, appreciation of humor, tendency to laugh, and coping humor.

Furthermore, with the construction of their own scale, Thorson and Powell (1993) made an important contribution to the sense of humor research, by gathering the four

dimensions of sense of humor: humor production and social uses, coping/adaptive humor, humor appreciation, and attitudes towards humor. The dimension of humor production and social uses of humor, can be described as the use of humor in social interactions; coping/ adaptive humor regards individuals who have the tendency to manage challenging situations through the use of humor as a coping/ adaptive mechanism ; humor appreciation is related to those who positively appreciate humor, both in terms of individuals and circumstances; and attitudes towards humor considers the individuals apparent importance of humor, and ability to enjoy life in a humorous way (Mesmer-Magnus et al., 2012; Thorson & Powell, 1993).

In addition, although it will not be the focus of this dissertation, it is essential to take into consideration the multi-dimensional conceptualization of humor, particularly the four humor styles of Martin et al. (2003), such as the affiliative and self-enhancing style, that are usually known as the positive types of humor, and the aggressive and self-defeating style, the negative types.

Meanwhile, it is also crucial to analyse humor in organizational terms, and not only in personal ones. Therefore, organizational humor is seen as "amusing communications that produce positive emotions and cognitions in the individual, group, or organization" (Romero & Cruthirds, 2006, p.59). On the other hand, sense of humor is considered a personality attribute of a consumer or employee, who has the capacity, both as a sender or receiver, to have successful humorous interactions, which ends up being essential in a workplace sphere, since it affects the ability of individuals to assess a situation, find humor when needed, and recognize, appreciate, and return it (Mathies et al., 2016).

Furthermore, as well as the humor itself, leader humor can also be divided into trait and behavioural. Leader trait humor relates to an individual dispositional feature (Martin & Lefcourt, 1983), meaning a tendency to exhibit entertaining behaviours and attitudes during social interactions (Martin, 2001), while leader behavioural humor looks at the rate and scope of leader's humor expressions when they are in contact with their subordinates (Cooper et al., 2018, as cited in Cheng et al., 2023).

Then, as sense of humor is considered a trait, coping strategy, individual ability, aesthetic response, attitude or even a typical behavioural pattern (Martin, 2003), a humorous leadership can be defined as a perception of a "behaviour enacted by a leader

and directed toward a subordinate that is appraised by the subordinate as funny or causes the subordinate to experience amusement" (Tan et al., 2020, p.1). In addition, it is also defined as a strategic resource that leaders decide to use when appropriate (Holmes & Marra, 2006), and a form of intentional and amusing communication, both formal and informal, which according to Wijewardena et al. (2017, p. 1318) is called as "managerial humor".

#### 2.1.2 Consequences

In general, it is known that humor has several benefits in a different range of areas, including the workplace, as it is stated to be an effective communication tool and facilitator of interpersonal relationships (Mathies et al., 2016). On the other hand, it is essential to keep into account that humor is a sensitive thing, since it can be a double-edged sword (Beard, 2014).

Humor can be either positive, or negative, regarding its effects, whether it comes from colleagues, or the leader itself. Therefore, positive humor can be considered as a functional behaviour, whether negative humor, usually leads to negative outcomes (Witt Smith & Khojasteh, 2013), since there are positive associations between sense of humor and psychological health variables, and negative associations among psychological distress (Kim et al., 2022).

Lately, leader's humor has become fundamental in terms of consequences for organizations (Kong et al., 2019), due to its effects on the organizational behaviour. To Rosenberg et al. (2021), there is a clear relationship between leadership outcomes and leader humor since it has the ability to influence work-related results of employees, which can explain why the implementation of humor by a leader yields such numerous benefits, as it is perceived as a valuable relational asset greatly esteemed by subordinates. Furthermore, leader humor also fosters positive attributes such as extraversion, consideration behaviours, and a positive affect associated with leadership traits (Kong et al., 2019).

According to Romero and Cruthirds (2006), leaders can use humor in order to secure power in hierarchical relationships, and to reduce social distance between them and their subordinates. Moreover, several researchers have already acknowledged the benefits of leader sense of humor on their subordinates such as wellbeing, engagement, job satisfaction and performance, creativity, leader effectiveness (Mesmer-Magnus et al., 2012), organizational citizenship behaviour, affective organizational commitment, and intent to stay (Kong et al., 2019). Hence, it does not turn humor leadership the main standard for organizational success, but it is assumed significant for building a high-performance effective team (Unal, 2014).

In addition, Tan et al. (2020) research also proposes that when employers are exposed to humorous leader's, they tend to see their organization as supportive one, leading to a positive work engagement, whether through their motivations or behaviours.

#### 2.2. Communication Openness

#### 2.2.1 Definition

Lately, organizations have been increasing their concern about finding the perfect communication climate, since it impacts the performance of the organization, by influencing the employee's work motivation (Noordin et al., 2010).

Rogers (1987), one of the pioneers on the communication openness research defined it as the "message sending and receiving behaviours of superiors, subordinates, and peers with regard to task, personal, and innovative topics" (p.54). In addition, Rogers (1987) states that his model is developed exclusively for an on-going organizational framework, which according to Schiller and Cui (2010) can be divided into three parts: "(1) who communicates with whom (direction of communication), (2) in what way (message sending and receiving), and (3) about what topics (complaints, personal opinions, suggestions, etc.)" (p.39), and it also includes three relationships, superior to subordinate, subordinate to superior, and peer to peer.

According to Kram and Isabella (1985), these peer relationships can be described as information, collegial, or special. The information peer purpose is mainly to share information's with colleagues related to the organization subjects, whether the collegial peer drive is to share feedback related to the job, as well as apprehensions of personal and professional matters, forming a more intimate relationship between peers (Myers et al., 1999). The special peer is classified as the closest and intimiste relationship, since it serves for being a friend (Myers et al., 1999).

Nowadays, since studies are becoming more aware on the importance of "cultivating and improving employee-organization communication management" (Kim, 2017, p.12), Ayoko (2007) defines communication openness as the ease of talking to one another as well as the range of understanding gained when speaking to each other.

#### 2.2.2 Consequences

In organizational terms, communication openness efforts may have consequences on business outcomes, which ends up impacting relationships in the organizations, whether between subordinates, or between leaders and subordinates.

According to Rogers (1987), open communication is one of the most vital business success factors, since it can affect organizational performance, decision-making, and job satisfaction. In addition, studies also state that if an organization achieves their communication goals, crises can be diminished, tasks are achieved whether organizational or group ones, and uncertainty is also reduced (Myers et al., 1999).

Moreover, regarding the consequences for employees, having an open communication culture has a clear impact on job performance, as well as a greater organizational commitment and trust (Mishra et al., 2014). Al-Omari et al. (2008), agrees that communication openness eases the exchange of ideas and gathering of information between employees, which ends up enhancing their motivation, participation during strategic organizational tasks, as well as their intent to stay in the organization. In addition, Morand (2005), also suggests that addressing the employees by their names, can also increase and benefit a culture of open communication.

The leadership of an organization also takes a huge place on how the communication flows between parties, since "managers who are perceived to be communicatively open have a positive impact on the superior-subordinate relationship and positively influence subordinate motivation" (Myers et al., 1999, p. 73), turning leaders who have a transparency leadership style more effective and well-received from their subordinates. Hence, leaders who develop an open communication culture are more likely to improve the reputation perception of their organizations, as well as the engagement of their employees (Kim, 2017).

Ayoko and Pekerti (2008) studies, also suggest that when an organization whose leadership is based on communication openness, it has the ability to minimize uncertainty and ambiguities in individuals' interactions, but also can reduce how negatively an occurrence affects workers' perceptions of trust.

Therefore, it is possible to state that if organizations allowed information's to flow openly, it would lead to better outcomes and a greater organizational commitment (Walden et al., 2017). Communication openness has turned so important for organizations for the past years, mainly due to the opinions of their own employees, since their concern is on having "inclusive communication, encompassing more regular and thorough communication, openness, instructions, feedback, and definition of roles" (Gallicano et al., 2012, p.233).

#### 2.3. Work Engagement

#### 2.3.1 Definition

Kahn (1990) is seen as the pioneer and one of the most influential researchers to the development of this concept, with his notion of psychological presence, stating that personal engagement is the "harnessing of organization members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performances" (p.694).

According to Schaufeli et al. (2002, p.74), work engagement is a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". Vigor involves high levels of energy and mental resilience, while dedication is characterized by being extremely involved in work, experiencing a powerful sense of meaning, enthusiasm, pride, and challenge (Mazzetti et al., 2023). Absorption refers to the employees' ability to be fully focused on their work, and happily engrossed by it, so time passes quickly and may even have trouble in detaching themselves from work (Mazzetti et al., 2023).

Moreover, Schaufeli et al. (2002), also considers work engagement "rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behaviour" (p.74), hence a moderately stable state of mind. Then, it is possible to state

that engagement takes a huge place on the performance of organizations, since according to Banihani et al. (2013), work engagement is a "multidimensional construct that involves behavioural as well as attitudinal characteristics which lead to a positive experience in the workplace" (p.404).

The burnout approach is also assumed essential in order to better understand work engagement, since it is argued that work engagement is the antithesis to burnout and are dissociated (Maslach et al. 2001; as cited in Banihani et al., 2013). Hence, Maslach et al. (2001 as cited in Banihani et al., 2013) states that, engagement is portrayed by involvement, energy, and efficacy, while burnout is related to cynicism, exhaustion, and inefficacy. Although sometimes it is possible to have a negative correlation between the two, experiencing low levels of engagement is not directly related to experiencing high levels of burnout, since they are two distinct perceptions (Schaufeli et al., 2002).

#### 2.3.2 Consequences

Engagement can have several positive consequences for organizations, as well as for their employees, since engaged workers are known to perform better than non-engaged workers for at least four main reasons: ability to experience positive emotions, better health, can create their own personal resources and work, and sometimes can extend their engagement to others (Bakker, 2009).

In general, different studies state that work engagement has a clear impact on the performance and wellbeing of employees, since it has the ability to turn their employees highly proactive, committed, dedicated, and eager to achieve their organizational objectives (Zahari & Kaliannan, 2023), which ends up reflecting a lot on the business outcomes of the organization (Harter et al., 2002).

Therefore, there are different measures that show their relationship with work engagement, such as measures related to performance (Bakker & Demerouti, 2008), organizational success (Salanova et al., 2005) or even employees (Koyuncu et al., 2006). In terms of performance, work engagement can have consequences on the profitability, productivity and performance of the employees, the job, and the tasks, while on organizational success, it has benefits on customer loyalty, satisfaction, and safety (Soares & Mosquera, 2019). In addition, some of the employee measures that play a more crucial role on the consequences of engagement are known as the employee intention to quit and their job satisfaction (Koyuncu et al., 2006). Consequently, Rich et al. (2010), also refers that engagement acts as a moderator in the relations among task performance, perceived organizational support, organizational citizenship behaviour, and core self-evaluation and value congruence.

Furthermore, engagement also relies on economic reasons, such as results and performance, and not only on organizational behaviour reasons, since it has the ability to reduce costs, lower turnover and even rise the profits (Harvard, 2013). Hence, it is possible to say that engagement plays a significant role on the behaviour of employees performing their work-related tasks (Tims et al., 2015), making it essential for organizations and their respective leaders to find tools to maximize the engagement of their employees, which according to Bailey et al. (2017), is the main measure to predict work engagement.

Ultimately, work engagement can be explained by the JD-R model of Bakker and Demerouti (2007), which comprehensively incorporates both its consequences and antecedents, thereby addressing various aspects of the job with the aim of optimizing overall performance. According to Kwon and Kim (2020), this model suggests that by diminishing job demands, it will benefit employees concentration and engagement levels, since "employees who are engaged and perform well are able to create their own resources, which then foster engagement again over time and create a positive gain spiral" (Bakker & Demerouti, 2008, p.218).

#### 2.4. Research Model and Hypotheses

In this subchapter, the proposed research model and hypothesis developed along the study will be presented, based on the previous literature review, as well as further studies and theories that justify the hypothesis in study. These hypotheses concern the relations established between the variables leader sense of humor and its own dimensions, communication openness, and work engagement, resulting on the research model developed for this dissertation.

The Social Exchange Theory (Cropanzano & Mitchell, 2005) considers that highquality relationships are based on social exchanges. Hence, this theory can relate to the variables in study, since when leaders apply humor in an effective way, they can create a positive social exchange by fostering an approachable and supportive work environment, which will allow individuals to show their thoughts and feelings (Kahn, 1990), and may elevate the levels of work engagement, as well as a greater communication openness.

The Social Information Processing Theory (Salancik & Pfeffer, 1978), can also be applied to face-to-face interactions, since its focus is on the interpretation, processing, and response to social cues, which may be applied to the relationship between leader's sense of humor and communication openness. According to this theory, when employees pay attention to social cues conveyed by their leader's humor, they may show positive responses, which will allow employees to feel a higher level of psychological safety (Wang et al., 2022). Then, by perceiving safety, it can promote a greater level of communication openness in the organization.

Moreover, beyond these theories, empirical results regarding the relations between variables in study will also be presented, which will lead to the development of the hypotheses for the research model.

#### 2.4.1 Leader Sense of Humor and Communication Openness

Organizations that are able to use a leader's humor approach are becoming much more self-aware of its importance to the success of organizations and well-being of employees (Unal, 2014), and having an open communication approach can also ease the process. Although it is seen as important, there are not many authors who have already studied this possible correlation between leader sense of humor and open communication.

Lynch (2002) research, suggest that these two variables play a complicated role in our daily lives, since being able to be humorous can clarify the success of social interactions. Moreover, they believe it looks like humor is essential in several situations, such as initial interactions and adjustment in the workplace. Then, by having sense of humor, organizations will have a tool for everyone to understand the environment and their relationships.

Subsequently, Romero and Cruthirds (2006), also believe that humor can be extremely relevant in terms of communication openness for organizations, since it "creates an open atmosphere by awakening positive emotions that enhance listening, understanding, and acceptance of messages" (p.61), which can ease the process of being honest and having an open communication between peers and subordinates.

In Martin and Gayle (1999) study, they have questioned on how an organizational leader's communication style could be related to their use of humor, in which they conclude that there is positive correlation between the communication style and the functional use of humor, in order to keep the group more open and cohesive.

On the other hand, since employee's voice is a concept that is very similar to open communication, it is also important to analyse studies proving positive associations between it and leader humor. Thus, employee voice is defined as wide range of methods by which workers "have a say" in what happens within their company (Rees et al., 2013), or constructive voice that is defined as one's "voluntary expression of ideas, information, or opinions focused on effecting organizationally functional change to the work context" (Maynes & Podsakoff, 2014, p. 92).

According to this, Cao et al. (2023), created a survey in which they analysed possible correlations between leader humor and employee voice, where they found that by the results, leader humor is significantly associated with employee voice, whether on promotive or prohibitive styles of voice, both with positive correlations. Additionally, Carnevale et al. (2022), developed a study, where it was concluded that leader humor is significative positively correlated with constructive voice, mainly when it comes from positive humor.

Thus, the following hypotheses are suggested:

**Hypothesis 1:** The perception of leader sense of humor is positively associated with communication openness.

**Hypothesis 1a:** The perception of humor production and social uses of humor is positively associated with communication openness.

**Hypothesis 1b:** The perception of coping/ adaptive humor is positively associated with communication openness.

**Hypothesis 1c:** The perception of humor appreciation is positively associated with communication openness.

**Hypothesis 1d:** The perception of attitudes towards humor is positively associated with communication openness.

#### 2.4.2 Leader Sense of Humor and Work Engagement

The use of humor, especially leader's sense of humor, can have multiple effects on organizations, since according to Goswami et al. (2016), employees' positive relationship with work can be related to work engagement. Consequently, positive humor usually has high repercussions on work engagement, such as energy, engrossment at work, and enthusiasm (Schaufeli & Bakker, 2004).

As a result, some authors found on their researches positive correlations between humorous leadership and work engagement, namely Zhang and Su (2020), who gathered information for their study, which allowed them to discover a significative positive correlation between leader humor and work engagement. In addition, consequential to their research, these authors also believed that by allowing leaders to use humor to communicate engaging subjects with their subordinates, they tend to feel uplifted and willing to contribute to elevate the levels of work engagement.

Furthermore, Goswami et al. (2016) study, demonstrates a strong correlation between leader's positive humor and work engagement. Tan et al. (2020), also studied the impact of leader's humor in the engagement of employees, which ended up being consistent with several other studies, stating that there is a positive association between the two variables.

On the other hand, since studies using both concepts are scarce, there are other studies showing a positive correlation between leader humor and similar perceptions to work engagement. Avolio et al. (1999), developed a study where it is shown that leader's humor is positively associated with individual performance, whether Sullivan (2013), developed a study among athletes to evaluate the relationship between leader's positive humor and team task performance and team integration, which was found to be true. Moreover, the meta-analysis by Mesmer-Magnus et al. (2012), also discovered that leader's humor, especially leader's positive humor, can be related positively with workgroup cohesion, employee job performance and satisfaction.

Thus, supported by the aforementioned literature, the following hypotheses are suggested:

**Hypothesis 2:** The perception of leader sense of humor is positively associated with work engagement.

**Hypothesis 2a:** The perception of humor production and social uses of humor is positively associated with work engagement.

**Hypothesis 2b:** The perception of coping/ adaptive humor is positively associated with work engagement.

**Hypothesis 2c:** The perception of humor appreciation is positively associated with work engagement.

**Hypothesis 2d:** The perception of attitudes towards humor is positively associated with work engagement.

#### 2.4.3 Communication Openness and Work Engagement

Having a culture of openness communication within organizations, tends to be highly effective on the performance and success of the organizations, which ends up also impacting the levels of work engagement of employees (Walden et al., 2017). Thus, there has been an increase in research on this topic, whether in terms of communication openness and transparent communication, or even employee's voice.

Despite that, studies that focuses mainly on the concept of communication openness are still very scarce since this notion is usually used conversely with other topics. Hence, on the research of relationships towards work engagement between several variables, such as employee communication, leadership styles and personality attributes of Saad et al. (2018), there has been found a correlation between work engagement and communication openness, as well as for the other variables. Then, this research found that there is a positive and very significant correlation between these topics.

Taking this into consideration, Vogelgesang et al. (2013) state that "leaders who communicate transparently will be perceived as possessing greater behavioural integrity (world-action alignment), which would facilitate followers' work engagement" (p.407), so they examined cadets from a military academy in the United States in order to test their hypothesis, coming to the conclusion that if a leader communicates openly, there is in fact a positive correlation with performance and work engagement.

Kim, (2017), developed a study in order to explore how leader's transparent communication is seen by PR practitioners, resulting in a significative positive association between transparent communication and work engagement, which means that if there was an increase on the levels of transparent communication, the levels of work engagement would also increase, especially if it came from their leaders.

On the other hand, employee's voice has also gained some importance in research, and since it is a concept that is highly associated with openness communication, it is also important to further develop, and analyse if there are positive associations between it and work engagement. Consequently, Rees et al. (2013) performed a study, finding that workers who perceived themselves of having a voice in the organization, tend to be more engaged in their functions, with a positive significant relation between them.

In this regard, the following hypothesis are presented:

**Hypothesis 3:** The perception of communication openness is positively associated with work engagement.

Considering that previous research indicates that leader sense of humor leads to higher perceptions of communication openness, and that perceptions of communication openness leads to higher levels of work engagement, we will also investigate whether perceptions of communication openness mediate the relationship between perceptions of leader's sense of humor and work engagement.

Based on the literature review presented and hypotheses formulated, the following research model is presented (Figure 1):



Figure 1: Research Model

#### **3. Empirical Study**

This chapter aims to describe the method used in the development of this dissertation, by describing the participants enrolled in the questionnaire, the instrument used, analyse the reliability of the chosen scales, as well as the results of the research.

#### 3.1 Method

Taking into consideration the main purpose of this Master's Final Work, the present study follows a quantitative methodology, with a structured questionnaire survey used as the primary data collection source. The questionnaire was developed and available on the Qualtrics software platform in Portuguese, and to support the data analysis, IBM SPSS Statistics and SmartPLS (Partial Least Squares) were used.

Moreover, it is considered as a convenience sample, since it was shared among a personal contact network, via social networks, such as WhatsApp, Facebook, Instagram, LinkedIn, and Reddit, during the months of December 2023 and January 2024.

#### 3.1.1 Participants

The final sample consists of 170 valid responses, however, only 167 respondents (1,8%) answered the sociodemographic questions, except on the questions regarding the number of children, activity sector, and type of contract where there were only 166 responses (2,4%). Therefore, to characterize this sample (Table 1), it is possible to state that 107 respondents (62,9%) correspond to the female gender, 59 respondents (34,7%) to the masculine gender, and 1 respondent (0,6%) preferred not to answer. In terms of age, the average range of the sample is 39 years, with respondents founded to be between the ages of 18 and 25 corresponding to 36,5% (62 respondents) of the sample, followed by the ages of 51 to 60 with 27,6% (47 respondents), 41 to 50 with 18,2% (31 respondents), both 26 to 30 years, and more than 60 years had 5,9% (10 respondents each), and finally the ages between 31 and 40 with 4,1% (7 respondents).

Furthermore, related to the marital status, 78 respondents (45,9%) are single, and 92 (54,1%) aren't single, where 60 (35,3%) are married, 23 (13,5%) are divorced or separated, 4 (2,4%) are widowers, and 2 (1,2%) answered other. Regarding children, 84 (49,4%) respondents have children, and 82 (48,2%) respondents do not have children.

In terms of level of education completed, 81 (47,6%) participants have a degree, 36 (21,2%) have a master's or a postgraduate degree, and 6 (3,5%) have a doctorate degree. Additionally, 35 participants (20,6%) have a high school degree, and 9 (5,3%) are at a basic education level.

Taking into consideration the activity sector of the respondents, 83 (48,8%) work in the private for-profit sector, 62 (36,5%) in the public sector, and 21 (12,4%) in the private non-profit sector. In terms of type of contract, 94 (55,3%) respondents have an openended employment contract, 26 (15,3%) have fixed-term employment contracts, 18 (10,6%) are interns, 11 (6,5%) are independent workers, and 17 (10%) choose the option "other".

Then, regarding the number of years in the organization, the options less than a year and more than 20 years had the same frequency, with 47 respondents (27,6%) each, followed by working for 1 to 5 years with 46 respondents (27,1%). Next, 11 respondents (6,5%) have been working in the organization for 11 to 15 years, 9 respondents (5,3%) have been working for 6 to 10 years, and 7 respondents (4,1%) have been working for 16 to 20 years in the same organization.

Considering the hierarchy position of the respondents, the qualified professionals are the ones who take the highest position with 81 respondents (47,6%), followed by the highly qualified professionals with 30 respondents (17,6%), supervisors/ team leader with 17 respondents (10%), non-qualified professionals with 16 respondents (9,4%), middle managers with 15 respondents (8,8%), and top managers with 8 respondents (4,7%). Subsequently, 122 respondents (71,8%) do not have a managerial role, while 45 respondents (26,5%) have a managerial role.

#### 3.1.2 Instrument

As previously said, the instrument used to gather data is a questionnaire, that consisted of 56 questions, divided into four sections, three related to variables in study, leader's sense of humor, communication openness, work engagement, and the fourth section related to sociodemographic data. The questionnaire was available in Portuguese, and for all scales was used a Likert-scale of five points, from "Totally Disagree" to "Totally Agree". Moreover, the scales used were based on studies, previously validated. Then, to express the reliability of this study, it is necessary that the internal consistency of the scales has at least a reference value of 0,7 expressed by the Cronbach's Alpha, and an internal consistency between the items superior to 0,2 (Field, 2013).

The first section aimed to measure the respondents perceptions regarding their leader's sense of humor, with the Multidimensional Sense of Humor Scale (MSHS; Thorson & Powell, 1993), which was validated and translated to the Portuguese context by Helena and Parreira, (2008), and adapted to this study, by focusing on the leader instead of the individual. In addition, it is composed of a 24-item scale, with four dimensions of humor, humor production and social uses (items 1 to 11), coping/ adaptive humor (items 12 to 18), humor appreciation (items 19 and 29), and attitudes towards humor (items 21 to 24).

In terms of reliability analysis, the scale's total Cronbach's Alpha is  $\alpha = 0,944$ , with all items having a correlation superior to 0,2 with the scale. By analysing the Cronbach's Alpha of the dimensions of the scale, which will be considered for analysis purposes, it is possible to state that four dimensions have a Cronbach's Alpha superior to 0,7 and all items with a correlation superior to 0,2 with the scale, such as the humor production and social uses of humor with a  $\alpha = 0,957$ , coping/ adaptive humor with a  $\alpha = 0,841$ , humor appreciation with a  $\alpha = 0,900$ , and attitudes towards humor with a  $\alpha = 0,840$ .

In the second section, was intended to measure how communication flows in the organizations, through the Group Communication Openness measure of Burchfield (1997) which was translated to Portuguese, since it evaluates how easy it is for members of the group to communicate openly with one another and how much understanding is obtained from such conversations. Therefore, the Group Communication Openness is composed of a five-item group communication, with a five-point Likert scale, from "strongly disagree" to "strongly agree". In the reliability analysis, was founded that the scale's total Cronbach's Alpha is  $\alpha = 0,899$ , with a correlation superior to 0,2 among all items.

To measure the level of work engagement, the 17-item version of the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003), adapted and validated to the Portuguese context by Teles et al. (2017) was deployed, one of the most important scales when measuring and studying engagement, since it is treated as "standard measurement tool in work engagement research" (Kulikowski, 2017, p. 2). The scale has the three dimensions included in the Schaufeli et al. (2002) definition of work engagement: Vigor (items 1, 4, 8, 12, 15, 17), Dedication (items 2, 5, 7, 10, 13), and Absorption (items 3, 6, 9, 11, 14, 16). On the other hand, despite the original questionnaire relied on a seven-point Likert scale, anchored by "never" to "always", in this study was adapted to a five-point Likert scale.

Regarding the reliability analysis, the scale's total Cronbach's Alpha is  $\alpha = 0,918$ , with all items having a correlation superior to 0,2 with the scale. Therefore, taking into consideration the three dimensions of the scale, their Cronbach's Alpha are vigor with  $\alpha = 0,781$ , dedication with  $\alpha = 0,876$ , and absorption with  $\alpha = 0,763$ . Moreover, in the three dimensions, all items have a correlation superior to 0,2.

Finally, the last section had a total of ten questions, consisting of sociodemographic variables, with the purpose of characterizing the sample, such as age, gender, marital status, number of children, level of education, activity sector, type of contract, number of years in the organization, hierarchical position, and managerial role.

#### 3.2 Results

The purpose of this chapter relies on presenting and explaining the results of the study, according to the objectives that were previously set. Firstly, the results regarding the mean and standard deviation of the total sample, followed by the analysis of significant differences in subgroups of the sample with the support of the ANOVA and the T-Student tests, and the analysis of relationships among variables will all be presented, (Tables mentioned can be consulted in Appendix 2).

#### 3.2.1 Mean and Standard Deviation of the Total Sample

As previously stated, all scales were measured through a five-point Likert scale, so it is assumed that the theoretical midpoint in this study is 3. Hence, by analysing the results (Table 2) it is possible to say that all variables, including the scales and the dimensions of them, have a mean superior to the theoretical point, meaning that in general, respondents have a positive perception towards their leader's sense of humor, are open to communicate in their organizations, and feel engaged in their work.

In terms of the variables regarding the scales of the questionnaire, the communication openness scale is the one where the mean presents a superior value (4,019), followed by the work engagement (3,777), and then leader's sense of humor (3,630).

Regarding the dimensions of the work engagement, the dedication variable is the one presenting a higher mean (4,040), followed by vigor (3,736), and absorption (3,598), giving an indication that respondents feel higher levels of work engagement in terms of dedication to the job and organization. In the leader's sense of humor scale, the humor appreciation dimension has the highest mean (4,306), contrasting with the humor production and social uses of humor dimension with the lowest mean (3,395), following there is the coping/ adaptive humor dimension (3,704), and attitudes towards humor (3,806).

#### 3.2.2 Analysis of Significant Differences in Sample Subgroups

The main purpose of this subchapter is to analyse whether there are any significant differences in the subgroups of the sample, using the ANOVA variance and t-Student tests. In these, the differences are considered relevant when the significant value is  $p \le 0,05$ , meaning there is 95% certainty that there are differences in the subgroups of the sample (Field, 2013).

Therefore, since the ANOVA variance test is suitable to compare two or more groups, the analysis was conducted to examine the variables age, level of education, and number of years in the organization. On the other hand, the remaining variables were studied trough the t-Student test, used to compare the mean of two groups.

Firstly, in terms of the sociodemographic variable gender, none of the variables were considered to have significant differences. Then, regarding the variable age (Table 3), there are significant differences on the work engagement variable (p = 0,002). In terms of means, it is possible to state that the highest mean value relies on the individuals over 51 years old (3,9856), followed by individuals between the age of 26 to 50 years old (3,8076). Finally, the lowest mean relies on the 18 to 25 years old individuals (3,5342).

Regarding the variable marital status (Table 4), was found that significant differences exist for work engagement (p < 0,001). Moreover, it is observed that the highest mean concerns the non-singles (3,9822), contrasting, with the single respondents who have the lowest mean (3,5211).

Meanwhile, in what concerns individuals who have or do not have children (Table 5), was also found that there is a significant difference regarding the levels of work engagement (p < 0,001). In general, individuals that have children experience more work engagement, by having a higher mean (3,9615), and individuals without children have the lowest mean to this same variable (3,5581).

On the variable level of education (Table 6), significant differences could be found on the attitudes towards humor (p < 0,001), stating that the mean is higher for those with a bachelor's degree (4,0309), than for those with a level of education up to the 12<sup>th</sup> year (3,3750) or with a master's or doctorate degree (3,9762). Additionally, in terms of differences by activity sector, none of the variables were considered to have significant differences.

In the type of contract (Table 7), significant differences exist on the variable work engagement (p = 0.026). Individuals who experience a permanent contract present a higher mean (3,8686), and individuals with a precarious contract present the lowest mean (3,6511).

Regarding the number of years in the organizations (Table 8), it is possible to say that there are significant differences on the work engagement (p = 0,032). In terms of work engagement, respondents who present a seniority superior to 20 years have the highest mean (4,0225), followed by a seniority of 6 to 20 years (3,7211), 1 to 5 years (3,6867), and individuals who have been working for less than a year in the organization present the lowest mean (3,6158).

At last, on the managerial role (Table 9), significant differences were found among the variable work engagement (p = 0,014). This variable state that having a managerial role implies a higher mean to work engagement (3,9673) and not having a managerial role indicates a lower mean to work engagement (3,6929).

#### 3.2.3 Analysis of Relationships Among Variables

To analyse the research model, it was chosen the Structural Equations Modelling (SEM) to test the hypothesis in study and conducted data analysis with PLS (Partial Least Squares). Taking into previous consideration that items that showed poor reliability (loadings below 0,6) were excluded from the analyses, Table 10 presents the final items that will be used for each construct, as well as their means, standard deviations, and loadings.

#### 3.2.3.1 Measurement Validity and Reliability

When it comes to reliability, both Cronbach's Alphas and composite reliabilities for latent variables exceeded the acceptable internal consistency threshold of 0,7 (Hair et al., 2017) (Table 11). Additionally, all standardized loadings of indicators surpass 0,6, further affirming indicator reliability (Hair et al., 2017) (Table 10).

Regarding convergent and discriminant validity, the average variance extracted (AVE) shows that there is a high convergent validity and all constructs are unidimensional, since it surpasses the minimum acceptable value of 0,5 (Hair et al., 2017) (Table 11). Moreover, to complement assessing convergent validity, bootstrap t-statistics for the standardized loadings of the indicators were computed (Hair et al., 2017), where it was found to be significant at the one percent significance level (Table 10), indicating strong convergent validity of the measurement model.

As Table 12 shows, the discriminant validity was analysed using the Heterotrait-Monotrait (HTMT) Ratio (Henseler et al., 2009), showing that the upper bound of 95 percent confidence interval for HTMT was found to be below the more conservative threshold of 0,85, indicating the absence of discriminant validity issues. Additionally, trough the full collinearity assessment approach of Kock (Kock, 2015), using all the variance inflation factor values (VIF), it can also be concluded that the study is free of common method bias.

#### 3.2.3.2 Model Estimation Results

Having established good validity and reliability indices in the analysis of the measurement models, the subsequent phase involves analysing the structural model in order to examine the relationships under study (Henseler et al., 2009).

Therefore, the bootstrapping procedure was used to assess the significance of the path coefficients (Table 13), however since some presented a *t*-value below 1,96 (p > 0,05), they were excluded. Those excluded that represented a non-significative relationship concerned the perception of leader sense of humor on communication openness (H1), perception of coping/adaptive humor on communication openness (H1b), perception of humor appreciation on communication openness (H1c), perception of attitudes towards humor on communication openness (H1d), perception of leader sense of humor on work engagement (H2), perception of coping/adaptive humor on work engagement (H2b), perception of attitudes towards humor on work engagement (H2c), and perception of attitudes towards humor on work engagement (H2d).

Then, Table 13 presents all significant direct effects in the model and effect sizes after removing the non-significant relationships, verifying partially hypotheses H1 with H1a (The perception of humor production and social uses of humor is positively associated with communication openness), H2 with H2a (The perception of humor production and social uses of humor is positively associated with work engagement), and hypothesis H3 (The perception of communication openness is positively associated with work engagement).

To analyse effect sizes (Table 13), Cohen (1988) considers that these are weak for  $f^2 = 0,02$ , moderate for  $f^2 = 0,15$ , and strong for  $f^2 = 0,35$ . As follows, the hypothesis H1a predicted that the perception of humor production and social uses of humor had a positive

association with communication openness, which was validated due to its moderate effect ( $\beta = 0,374$ ; p < 0,01;  $f^2 = 0,162$ ). Hypothesis H2a proposed that the perception of humor production and social uses of humor had a positive association with work engagement, which can be verified trough the weak effect it presents ( $\beta = 0,186$ ; p < 0,05;  $f^2 = 0,040$ ). Lastly, hypothesis H3 projected that the perception of communication openness had a positive association with work engagement, which was also validated due to its moderate effect ( $\beta = 0,401$ ; p < 0,01;  $f^2 = 0,184$ ).

Further than the hypothesis, it was also tested the significant indirect effects (Table 14), where the mediating role of communication openness was analysed, which demonstrates that this indirect relationship is also considered significant in the model.

Additionally, we examined the coefficient of determination ( $\mathbb{R}^2$ ) for the endogenous constructs to assess the model's explanatory capability (Hair et al., 2017). The analysis revealed that the model explains 25,1% of variance for work engagement and 14% of variance for communication openness.

Lastly, the predictive relevance was analysed, using blindfolding to calculate the Stone-Geiser's  $Q^2$ , where it is possible to conclude that the model has predictive relevance, since all values of  $Q^2$  are below zero.

Figure 2 presents the final structured model:



Figure 2: Final Structured Model

#### 4. CONCLUSIONS

This chapter aims to present the main conclusions of the study, as well as its theoretical and practical contributions. The limitations found during the development of the study, and possible suggestions for future research will also be presented.

#### 4.1 Summary of results

The purpose of this section, is to analyse the main results of this study, taking into account the objectives that were previously defined.

In what concerns the first objective defined, the purpose was to analyse the employee's perception levels regarding their leader's sense of humor, communication openness, and employee work engagement in the Portuguese organizational context. For this effect, the means of each of the scales and their dimensions were analysed in the total sample, where it was possible to conclude that the mean of the answers of the respondents are all above the theoretical midpoint. In general, respondents have a positive perception towards their leader's sense of humor, believe they have an open communication environment in their organizations, and feel engaged in their work.

Regarding the second objective, significant differences between the subgroups of the sample were analysed, where significant differences were found in the majority of the sociodemographic data, except for the variables gender and activity sector. On the other hand, significant differences relied mainly on the work engagement variable, and attitudes towards humor for the level of education. Therefore, these results give the perception that there is no difference between barely any sociodemographic variables for both perceptions of leader's sense of humor and communication openness, but the levels of work engagement can differ a lot among respondents.

The levels of work engagement show higher values on individuals who are over 51 years old, are married, have children, have a permanent contract, are in the same organization for more than 20 years, and have a managerial role. In general, this can be explained since individuals who present these characteristics have a more stable life, both personally and professionally, which allows them to experience higher levels of work engagement. On the other hand, respondents who are younger, single, do not have children neither have a permanent contract, are in the same organization for less than a

year, and do not have a managerial role are not as engaged, which can be justified for some reasons. Overall, individuals who are younger and have been in the organization for a short period of time (less than a year), do not have as much work experience, know how or are as integrated like older generations are, and therefore may not feel the same level of attachment and sense of meaning towards their work and organization. For the same reasons, individuals that do not have a managerial role, usually do not feel the same level of responsibility, and may detach themselves from work more easily.

Finally, the third objective aimed to analyse the relationships established, where it was concluded that the perception of leader's sense of humor being positively associated with communication openness and work engagement, only has a significant relation in the dimension of humor production and social uses of humor. These results can suggest that although leader's sense of humor has a positive impact on the other variables, and all the dimensions expressed a relatively high mean, only the dimension of humor production and social uses of humor production openness and work engagement.

Additionally, it was also found that the perception of communication openness can be positively associated with work engagement, which can be interpreted as individuals who experience an open communication environment and are comfortable in their organizations, are more likely to be engaged in their work and committed to the organization. Moreover, by analysing the indirect significant effects, it is possible to state that besides these direct relationships, communication openness can also be seen as a mediator between the leader's sense of humor, in terms of humor production and social uses, and employee's work engagement.

Moreover, it is noteworthy that only one of the dimensions of leader's sense of humor presented significant associations. Therefore, the dimensions of coping/ adaptive humor, humor appreciation, and attitudes towards humor do not have significant impacts for neither communication openness nor work engagement. These may be due to the way the Multidimensional Sense of Humor Scale (Thorson & Powell, 1993) was used. While it was originally developed for self-report, in this study it was used as an other-report. Then, it is possible that respondents were only aware of the most observable dimension - the use of humor in social interactions.

Then, these results regarding significant direct and indirect effects align and reinforce the literature review presented. Similarly to Romero and Cruthirds (2006) and Lynch (2002) studies, this research shows the importance and relevance that a humorous leadership has on the communication openness environment of an organization, as by creating positive emotions, it creates an open atmosphere for employees. In terms of work engagement, consistent with previous investigations (Goswami et al., 2016; Zhang & Su, 2020), it is also demonstrated the impact that positive humor, especially when it comes from the leader, has on the levels of work engagement. The positive relation between communication openness and work engagement found, also aligns with previous researches who found positive correlations with these variables (Saad et al., 2018; Vogelgesang et al., 2013), indicating that a culture of communication can impact whether employees feel more or less engaged.

#### 4.2 Contributions of the Study

Concerning the contributions of the study, it is possible to distinguish theoretical and practical contributions. In terms of theoretical contributions, it is possible to highlight the inexistence of studies analysing the proposed variables, according to the research model developed. Although there were already some empirical research on the impact of a humorous leadership in the organizational context, there was a lack of research that studied its impact on both variables.

This study analyses the employee's perceptions levels regarding their leader's sense of humor, and how it can affect the perception of communication openness in the organization, as well as increase the levels of work engagement. Hence, it turns this a study with an innovative character, as it contributes to the research of the JD-R model, by including two more resources that have been under-researched. Specifically, for social resources analyses the leader's sense of humor as a feature of leader support, and for organizational resources, analyses communication openness as a feature of organizational communication.

Therefore, the present study contributes to a better understanding of the role that a humorous leader can have in organizations, specifically in terms of fostering a communication openness environment within the organization, and employee work engagement. Moreover, it is presented a research model that explains 14% of the
communication openness and 25,1% of the work engagement, indicating that there is also an indirect relationship, in which communication openness can act as a mediator between leader's sense of humor and work engagement.

In terms of practical contributions, this study offers valuable insights to organizations and to Human Resources Managers, as they will now have a wider understanding of the impact that a leader humor can have on work engagement and communication openness. Then, is assumed essential the development of strategies that will allow to intensify the perceptions of leader's sense of humor, communication openness, and employee's work engagement in the organization.

Firstly, activities regarding team building may be employed, which would include group exercises, team-building games, and icebreakers that would take into main consideration the integration of humor in a constructive way. These humorous activities would strengthen team bonds, as well as improve the communication among team members of the organization.

The implementation of training courses regarding humor are also a suggestion, where organizations would provide training for leaders to enhance their humor skills in a professional context, with coaching and self-assessment activities, for example. These training courses may allow leaders to understand how they can improve the levels of work engagement and communication openness in the organization.

At last, promoting a positive work environment can also be an important contribution, since by encouraging leaders to be humorous in their interactions, it can create opportunities for positive feedback and adaptability, for example. As organizations encourage leaders to be more humorous in the interactions with their subordinates, it is expected that employees to feel more engaged and open to communicate.

Besides the theoretical and practical contributions, by analysing antecedents of employee well-being and organizational performance, this study may also entail a broader contribution to SDG 3 - Good health and Well-Being, and SDG - 8 Decent Work and Economic Growth (United Nations, n.d.).

#### 4.3 Limitations and Suggestions for Future Research

Along the development of this study, some limitations were found. Firstly, the fact that the sample is by convenience creates restrictions in terms of its representativeness, as well as generalization of results. On the other hand, the sample characteristics and size, since the results are not related to a specific sector of activity resulting on a disparity of areas not distributed equally, and it is considered a relatively small sample regarding the number of employees on the Portuguese organizational context. Therefore, for future research may be important applying the study to a specific activity sector or organization, increase the number of Portuguese respondents, or even extend it to other countries, in order to gather a more representative sample and more conclusive results.

Additionally, the imbalance in the number of responses in the variables gender and activity sector, may be related to the difficulty in identifying significant differences in the sociodemographic variables mentioned.

Another limitation of the study relies on the absence of a conclusive explanation to the non-significant relations (H1, H1b, H1c, H1d, H2, H2b, H2c, H2d), which could be related to the change in the evaluation in the Multidimensional Sense of Humor Scale (Thorson & Powell, 1993), as well as to the methodology used, since it was a quantitative measure. Additionally, since the questionnaire was answered online, the attention of the respondents could also impact the responses provided. Then, it would be important in future research to add a qualitative measure as well, as by interviewing respondents there is a greater chance of finding more reliable and complete answers and could also help finding an explanation to the non-significant relations.

On the other hand, for future researches that aim to keep using the same method, with the Multidimensional Sense of Humor Scale (MSHS, Thorson & Powell, 1993) in the Portuguese context, it is suggested to only take into account the humor production and social uses of humor dimension, as it is the one that was found significant.

For future research, it also recommended an analysis of the developed model considering different analysis from the responses from leaders to non-leaders, since by not having any leader, they could have considered themselves on the leader's sense of humor part of the questionnaire. These responses could contribute to biases, such as a more positive self-evaluation of the perception of its own humor.

As seen on the literature review, humor is difficult to define and can be seen in different ways, but in this study, we took as our main standard the definition of humor as a trait, sense of humor, so for future research could be interesting to integrate more of the distinguished definitions of humor.

Finally, regardless of the limitations identified, this study contributes with valuable data and insights for the organizational Portuguese context. With the growing awareness for organizations to have the best possible work environment, it is possible to state that the leader's humor can positively impact organizations, both in terms of work engagement and communication openness, mainly in terms of humor production and social uses.

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#### APPENDICES

### Appendix 1 – Instrument

The present study is part of a master's dissertation that I am conducting at ISEG - Lisbon School of Economics & Management, University of Lisbon. I appreciate your collaboration, which is essential for carrying out this work.

Study objective: The main goal of the study is to analyse the use of humor in an organizational context.

Procedures: The questionnaire consists of various statements, to which you must express your opinion according to the respective indicated scale. In the end, you will be requested to answer some sociodemographic data, such as age and level of education.

Expected duration: The completion of the questionnaire is estimated to take approximately 10 minutes.

Confidentiality: The information provided during this study will be treated with confidentiality. The study does not disclose any data that could identify the participant. There will be no questions asking for identification or any element compromising anonymity.

Voluntary participation: Your participation in this study is entirely voluntary. Note that you are free to not participate or to stop participating at any time before submitting your answers.

Right to withdraw from the study: You have the right to withdraw from the study, simply click on the "close" button on Qualtrics.

If you have any questions about the study or need to report a problem related to it, please contact: Leonor Van Olffen, leonorvanolffen@aln.iseg.ulisboa.pt.

### Part 1: Leader's Sense of Humor

In this section, you will find some statements regarding your direct supervisor. Please indicate your level of agreement with these statements according to the presented scale (1 - Totally disagree; 2 - Disagree; 3 - Do not agree nor disagree; 4 - Agree; 5 - Totally agree).

My direct supervisor	1	2	3	4	5
1 - Is regarded as something of a wit in the organization.					
2 - Can say things in such a way as to make people laugh.					
3 - His/ Her clever sayings amuse others.					
4 - People look to him/ her so say amusing things.					
5 - Uses humor to entertain his/ her subordinates.					
6 - Is confident that can make other people laugh.					
7 - People from the organization tell him/ her that he/ she says funny things.					
8 - Sometimes thinks up jokes or funny stories.					
9 - Can often crack people up with the things he/ she says.					
10 - Can ease a tense situation by saying something funny.					
11 - Can actually have some control over a group by his/ her uses of humor.					
12 - Humor helps him/ her cope.					
13 - Uses of wit or humor help him/ her master difficult situations.					
14 - Considers that coping by using humor is an elegant way of adapting.					
15 - Considers that trying to master situations through the use of humor					
doesn't work.					
16 - Considers that humor is a lousy coping mechanism.					
17 - Considers that uses of humor help him/ her to put at ease.					
18 - Can use wit to help adapt to many situations.					
19 - Appreciates those who generate humor.					
20 - Likes a good joke.					
21 - Considers calling somebody a "comedian" a real insult.					
22 - Dislikes comics.					
23 - Considers people who tell jokes a pain in the neck.					
24 - Gets uncomfortable when somebody is cracking jokes.					

### Part 2: Communication Openness

In this section, you will find some statements regarding communication within your organization. The statements refer to your workgroup, if you don't have one, please respond considering the colleagues with whom you interact the most. Please indicate your level of agreement with these statements according to the presented scale (1 - Totally disagree; 2 - Disagree; 3 - Do not agree nor disagree; 4 - Agree; 5 - Totally agree).

	1	2	3	4	5
1 - It is easy to talk openly to all members of my workgroup.					
2 - Communication in my group is very open.					
3 - I find it enjoyable to talk to other members in my group.					
4 - When people speak to each other in my group, there is great deal of					
understanding.					
5 - It is easy to ask for advice from members of my group.					

# Part 3: Work Engagement

In this section, you will find some statements regarding your connection to work and how you feel about it. Please indicate your level of agreement with these statements according to the presented scale (1 - Totally disagree; 2 - Disagree; 3 - Do not agree nor disagree; 4 - Agree; 5 - Totally agree).

	1	2	3	4	5
1 - At my work, I feel that I am bursting with energy.					
2 - I find the work that I do full of meaning and purpose.					
3 - Time flies when I am working.					
4 - At my job, I feel strong and vigorous.					
5 - I am enthusiastic about my job.					
6 - When I am working, I forget everything else around me.					
7 - My job inspires me.					
8 - When I get up in the morning, I feel like going to work.					
9 - I feel happy when I am working intensely.					
10 - I am proud of the work that I do.					
11 - I am immersed in my work.					

12 - I can continue working for very long periods at a time.			
13 - To me, my job is challenging.			
14 - I get carried away when I am working.			
15 - At my job, I am very resilient, mentally.			
16 - It is difficult to detach myself from my job.			
17 - At my work I always persevere, even when things do not work well.			

### Part 4: Sociodemographic data

In this section, you will find some questions related to your sociodemographic information.

Age:

- o 18 to 25 years
- $\circ$  26 to 30 years
- $\circ$  31 to 40 years
- $\circ$  41 to 50 years
- $\circ$  51 to 60 years
- More than 60 years

### Gender:

- o Feminine
- o Masculine
- o Other
- Prefer not to answer

Marital status:

- o Single
- Married/ Non-marital partnership
- Divorced/ Separated
- o Widower
- o Other

Do you have children?

- o Yes
- o No

Level of education:

- Up to the  $3^{rd}$  cycle of basic education ( $9^{th}$  year)
- High school  $(12^{th} year)$
- Degree or bachelor's degree

- Master's degree or postgraduate degree
- Doctorate degree

Activity sector:

- Public sector
- Private for-profit sector
- Private non-profit sector

Contractual situation:

- Open-ended employment contract (effective)
- Fixed-term employment contract (non-effective)
- o Independent worker
- o Trainee
- o Other

Number of years in the organization:

- Less than a year
- $\circ$  1 to 5 years
- $\circ$  6 to 10 years
- 11 to 15 years
- $\circ$  16 to 20 years
- More than 20 years

What is your hierarchy position in the organization?

- Top manager
- Middle manager
- o Supervisor/ Team leader
- Highly qualified professional
- Qualified professional
- Non-qualified professional

Do you hold a managerial position?

- o Yes
- o No

### Appendix 2 – Statistical Analysis Tables

Question	Options	Ν	%
Gender:	Female	107	62,9%
	Masculine	59	34,7%
	Prefer not to answer	1	0,6%
	Other	0	0%
Age:	18 to 25 years old	62	36,5%
-	26 to 30 years old	10	5,9%
	31 to 40 years old	7	4,1%
	41 to 50 years old	31	18,2%
	51 to 60 years old	47	27,6%
	Over 60 years old	10	5,9%
Marital Status:	Single	78	45,9%
	Married	60	35,3%
	Divorced/ Separated	23	13,5%
	Widower	4	2,4%
	Other	2	1,2%
Do you have children?	Yes	84	49,4%
	No	82	48,2%
Highest level of education completed?	Until basic education level (9 <sup>th</sup> grade)	9	5,3%
-	Highschool (12 <sup>th</sup> grade)	35	20,6%
	Bachelor's degree	81	47,6%
	Master's or Postgraduate degree	36	21,2%
	Doctorate degree	6	3,5%
Activity sector:	Public sector	62	36,5%
	Private for-profit sector	83	48,8%
	Private non-profit sector	21	12,4%
Type of contract:	Open-ended employment contract	94	55,3%
	Fixed-term employment contract	26	15,3%
	Independent worker	11	6,5%
	Intern	18	10,6%
	Other	17	10%
Number of years in the organization:	Less than a year	47	27,6%
	1 to 5 years	46	27,1%
	6 to 10 years	9	5,3%
	11 to 15 years	11	6,5%
	16 to 20 years	7	4,1%
	Over 20 years	47	27,6%

### **Table 1: Sample characterization**

What is your hierarchy position?	Top managers	8	4,7%
	Middle managers	15	8,8%
	Supervisor/ Team leader	17	10%
	Highly qualified professional	30	17,6%
	Qualified professional	81	47,6%
	Non-qualified professional	16	9,4%
Do you have a managerial role?	Yes	45	26,5%
	No	122	71,8%

Source: Own elaboration (SPSS)

### Table 2: Descriptive Statistics and Total and Factor Reliability Analysis

		Ν	Mean	Standard Deviation	Cronbach's Alpha
Leader Humor	Humor Production and Social Uses of Humor	170	3,395	1,064	0,957
	Coping/Adaptive Humor	170	3,704	0,862	0,841
	Humor Appreciation	170	4,306	0,946	0,900
	Attitudes Towards Humor	170	3,806	1,001	0,840
	Total	170	3,630	0,807	0,944
Work Engagement	Vigor	170	3,736	0,742	0,781
	Dedication	170	4,040	0,846	0,876
	Absorption	170	3,598	0,803	0,763
	Total	170	3,777	0,726	0,918
Communication Openness	Total	170	4,019	0,959	0,899

Source: Own elaboration (SPSS)

### Table 3: ANOVA - Differences by age

		Ν	Mean	Ζ	Sig.
Work Engagement	18 to 25 years old	62	3,5342		
	26 to 50 years old Over 51 years old	48 57	3,8076 3,9856	6,372	0,002
	Total	167	3,7668		

Source: Own elaboration (SPSS)

### Table 4: T-test - Differences by marital status

		Ν	Mean	Z	Sig.
Work Engagement	Single Non-single	78 89	3,5211 3,9822	1,217	<0,001

Source: Own elaboration (SPSS)

		Ν	Mean	Z	Sig.
Work Engagement	Yes	Yes 84 3,9615 0,800	0.800	<0,001	
	No	82	3,5581	0,899	<0,001

# Table 5: T-test - Differences by children

Source: Own elaboration (SPSS)

#### Table 6: ANOVA - Differences by level of education

		Ν	Mean	Z	Sig.
Attitudes towards humor	Up to 12° year	44	3,3750		
	Bachelor's degree	81	4,0309	7 705	<0.001
	Master's or doctorate degree	42	4,0309 3,9762	7,785	<0,001
	Total	167	3,8443		
	•				

Source: Own elaboration (SPSS)

#### Table 7: T-test - Differences by type of contract

		Ν	Mean	Z	Sig.
Work Engagement	Permanent contract	94	3,8686	2,009 0	0,026
	Precarious contract	72	3,6511		•,•=•

Source: Own elaboration (SPSS)

#### Table 8: ANOVA - Differences by number of years in the organization

		Ν	Mean	Ζ	Sig.
Work Engagement	Less than a year	47	3,6158		
	1 to 5 years 6 to 20 years	46 27	3,6867 3,7211	3,018	0,032
	More than 20 years Total	47 167	4,0225 3,7668		

Source: Own elaboration (SPSS)

#### Table 9: T-test - Differences by managerial role

		Ν	Mean	Z	Sig.
Work Engagement	Yes No	45 122	3,9673 3,6929	0,102	0,014

Source: Own elaboration (SPSS)

Construct	Item	Mean	Standard	Loading	t-test	p-
		2 (20	Deviation	0.010	16 (01	value
Humor Production	HPSUHumor_1	3,629	1,310	0,812	16,681	0,000
and Social Uses of	HPSUHumor_2	3,629	1,217	0,835	26,587	0,000
Humor	HPSUHumor_3	3,559	1,269	0,841	26,750	0,000
	HPSUHumor_4	2,806	1,229	0,792	28,988	0,000
	HPSUHumor_5	3,165	1,305	0,837	28,786	0,000
	HPSUHumor_6	3,441	1,173	0,822	25,370	0,000
	HPSUHumor_7	3,071	1,335	0,845	36,039	0,000
	HPSUHumor_8	3,706	1,176	0,837	28,457	0,000
	HPSUHumor_9	3,441	1,319	0,870	37,673	0,000
	HPSUHumor_10	3,547	1,302	0,857	30,566	0,000
	HPSUHumor_11	3,347	1,303	0,852	31,694	0,000
Coping/Adaptive	CAHumor_1	3,635	1,340	0,876	30,062	0,000
Humor	CAHumor_2	3,571	1,283	0,876	29,632	0,000
	CAHumor_3	3,694	1,168	0,871	37,442	0,000
	CAHumor_6	3,947	1,007	0,767	15,453	0,000
	CAHumor_7	3,606	1,144	0,782	14,941	0,000
Humor Appreciation	HumorAP_1	4,235	1,008	0,954	80,325	0,000
	Humor AP_2	4,376	0,970	0,953	95,010	0,000
Attitudes Towards	ATHumor 1	3,671	1,202	0,614	3,389	0,001
Humor	ATHumor_2	3,806	1,229	0,864	5,724	0,000
	ATHumor 3	3,853	1,211	0,892	5,378	0,000
	ATHumor_4	3,894	1,213	0,857	4,002	0,000
Work Engagement	EngVigor 1	3,671	1,039	0,748	15,533	0,000
	EngVigor 2	3,624	1,040	0,824	25,917	0,000
	EngVigor 3	3,271	1,250	0,717	14,314	0,000
	EngVigor 4	3,688	1,194	0,665	12,400	0,000
	EngDedication 1	4,347	0,833	0,629	12,939	0,000
	EngDedication 2	3,835	1,110	0,870	42,992	0,000
	EngDedication 3	3,729	1,162	0,838	28,243	0,000
	EngDedication 4	4,253	0,940	0,730	13,992	0,000
	EngDedication 5	4,035	1,040	0,744	18,610	0,000
	EngAbsorption_1	3,759	1,071	0,700	11,320	0,000
	EngAbsorption 3	3,682	1,230	0,739	15,585	0,000
	EngAbsorption 4	3,771	1,012	0,680	11,144	0,000
	EngAbsorption 5	3,794	1,116	0,676	10,677	0,000
Communication	ComOpen 1	4,124	1,075	0,878	42,251	0,000
Openness	ComOpen 2	3,894	1,075	0,900	54,955	0,000
~remiess	ComOpen 3	4,188	1,203	0,900	22,426	0,000
	ComOpen 4	3,853	1,005	0,824	22,420	0,000
	ComOpen 5	4,035	1,107	0,812	22,131	0,000
	aboration (SmartDLS		1,079	0,000	21,304	0,000

## Table 10: Means, Standard Deviations and Standardized Loadings of Indicators

Source: Own elaboration (SmartPLS)

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Attitudes Towards Humor	0,840	0,885	0,663
Coping/Adaptive Humor	0,891	0,920	0,699
Work Engagement	0,930	0,939	0,546
Humor Production and Social Uses of Humor	0,957	0,962	0,700
Humor Appreciation	0,900	0,952	0,909
Communication Openness	0,900	0,926	0,715

### **Table 11: Reliability and Validity Measures**

Source: Own elaboration (SmartPLS)

### Table 12: Heterotrait-Monotrait Ratio

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Attitudes Towards Humor						
(2) Coping/Adaptive Humor	0,274					
(3) Work Engagement	0,136	0,401				
(4) Humor Production and Social Uses of Humor	0,206	0,828	0,334			
(5) Humor Appreciation	0,547	0,755	0,364	0,612		
(6) Communication Openness	0,193	0,357	0,501	0,395	0,361	

Source: Own elaboration (SmartPLS)

## **Table 13: Significant Direct Effects and Effect Sizes**

Hypotheses	Relationships	β	<b>F</b> <sup>2</sup>	t-test	p-value
II1a	Humor Production and Social Uses of	0.274	0,162	6,038	0,000
H1a	Humor $\rightarrow$ Communication Openness	0,574			
H2a	Humor Production and Social Uses of	0.186	0,040	2,184	0,029
	Humor $\rightarrow$ Work Engagement	0,180			0,029
Н3	Communication Openness $\rightarrow$ Work	0,401	0,184	5,862	0,000
	Engagement	0,401			0,000

Source: Own elaboration (SmartPLS)

Relationships	β	t-test	p- value
Humor Production and Social Uses of Humor $\rightarrow$	0,150	4,112	0,000
Communication Openness → Work Engagement			

# **Table 14: Significant Indirect Effects**

Source: Own elaboration (SmartPLS)