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**EMPOWERING AND TOXIC LEADERSHIPS AND
WORK MOTIVATION: A FUZZY SET QUALITATIVE
COMPARATIVE ANALYSIS**

**Dissertação no âmbito do Erasmus Mundus Joint Master Degree
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(WOP-P)**

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Thomas Edison

Abstract

The aim of this study is to identify and describe configurations of toxic and empowering leadership dimensions that are necessary and/or sufficient to different types of work motivation, according to the self-determination theory. The present research intends to deepen the understanding of the relationship between leadership and work motivation beyond the general patterns found in previous studies. With fuzzy set qualitative comparative analysis, the toxic and empowering leadership dimensions are combined in order to show their role as necessary and or sufficient conditions for each work motivation dimension here considered the outcome. Three scales were applied (toxic leadership scale, empowering leadership questionnaire, multidimensional work motivation scale) to 408 Portuguese workers. The results showed that high amotivation occurs in absence of self-promotion, absence of abusive supervision and absence of authoritarian leadership as necessary conditions. Extrinsic social regulation occurs in absence of self-promotion and absence of abusive supervision. High level of extrinsic material regulation and introjected regulation occurs in absence of self-promotion, absence of abusive supervision and absence of authoritarian leadership, in an independent way. For identified regulation absence of self-promotion and absence of abusive supervision are necessary conditions. For intrinsic regulation, absence of self-promotion, absence of abusive supervision and absence of authoritarian leadership, occur as necessary conditions, in an independent way. Only four outcomes present sufficient conditions: extrinsic material regulation, introjected regulation, identified regulation and intrinsic regulation. The conditions are interpreted as psychological processes which are active in subsamples of the 408 workers.

Keywords: empowering leadership; toxic leadership; work motivation; self-determination Theory; fuzzy sets Qualitative Comparative Analysis.

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Introduction

The more complex society gets, the more sophisticated leaders must become (Fullan, 2001). In today's global world of continuous changes, organizations face a multitude of challenges. Leaders are expected to be more adaptive and flexible (Bass, Avolio, Jung, & Berson, 2003), and often are asked to lead and motivate not only individuals, but also teams as a whole (Cohen & Bailey, 1997; Hackman & Hackman, 2002; Kozlowski & Bell, 2003; Chen, Kirkman, Kanfer, & Rosen, 2007).

In this scenario, researchers and practitioners became more and more aware of the huge impact of leadership within the organization, particularly on subordinates (Bambale, 2014; Hansbrough & Jones, 2014; Hernandez, Eberly, Avolio & Johnson, 2011; May, Wesche, Heinitz & Kerschreiter, 2014; Miniotaitė & Bučiūnienė, 2013; Steele, 2011). Previous research pointed out that a leader can directly influence their subordinates' job involvement (Tuckey, Dollard & Baker, 2012) and job satisfaction (Nyberg et al., 2005). Moreover, both work motivation and leadership are two concepts that influence and contribute to long-term organizational health and employees' well-being (Steers, Mowday, & Shapiro, 2004; Doshi & McGregor, 2015).

Several authors have pointed out how diverse leadership styles can have a different impact on work motivation (Gagné, Senécal & Koestner, 1997; Chen, Sharma, Edinger, Shapiro & Farth, 2010; Zhang & Bartol, 2010). Considering that toxic and empowering leadership are defined by the detrimental or beneficial effects on subordinates, we focus our attention on these two types of leadership analyzing how these are present or absent when employees' motivation occurs. We first provide a conceptualization of empowering and toxic leadership, clarifying and distinguishing the two constructs from other closely related leadership concepts.

Empowering leadership

The concept of empowerment was introduced in the field of management in the 1980s (Bartunek & Spreitzer, 2006). Empowering leadership essentially involves encouraging and fostering employees to head and manage themselves (Tuckey, Dollard & Baker, 2012). This concept is defined as a process of sharing power, and allocating autonomy and responsibilities to followers, teams, or collectives through a specific set of leader behaviors for employees to enhance internal motivation and achieve work success (Ahearne, Mathieu, & Rapp, 2005; Amundsen & Martinsen, 2014; Arnold, Arad, Rhoades, & Drasgow, 2000; Sharma & Kirkman, 2015; Sims Jr, Faraj, & Yun, 2009). Additionally, empowering leadership includes providing

relevant information and knowledge which is required for employees to take autonomy and responsibility (Arnold et al., 2000).

A strong interest in this leadership style appears to be justified given that such leadership behaviors are in line with the trend to ensure employees greater discretion at work to foster work motivation and unlock the potential of an increasingly better educated and more skilled workforce (Srivastava, Bartol, & Locke, 2006). Considering that meaning, we argue that the concept of empowering leadership lends itself particularly well to explore the link between leader behaviors and employees' work motivation.

By empowering leadership it is expected followers feel stimulated to assume responsibilities, to self-reward their efforts and to seek out opportunities to grow (Pearce & Sims, 2002). Essentially, empowering leadership is a specific set of leader behaviors which may foster psychological empowerment, and in turn enhances various desirable work outcomes (Maynard, Gilson, & Mathieu, 2012; Seibert, Wang, & Courtright, 2011; Zhang & Bartol, 2010),

Since the concept of empowering leadership is based on leader support-related concepts, the similarities with other established leadership concepts are inevitable (Cheong et al., 2018). Empowering leadership has emerged as a particular form of leadership, different from other approaches such as participative, transformational and ethical leadership (Pearce et al., 2003). Participative leadership and empowering leadership both encourage active involvement of followers in the decision making process, but empowering leadership reflects a broader concept and includes the notion of followers' participative decision making (Ahearne et al., 2005; Arnold et al., 2000). More specifically, participative leader behaviors are a necessary aspect of, but not sufficient condition for the construct of empowering leadership (Cheong et al., 2018). Empowering means also to provide the necessary resources for those empowered to be able to take the responsibility they are required to.

Although previous empirical studies have shown high correlations between transformational leadership and empowering leadership (e.g., Amundsen & Martinsen, 2014), in contrast to transformational leaders, empowering leaders engage in a set of behaviors which tend to develop each follower's own abilities among group members (Manz & Sims Jr., 1987, 2001). Moreover, the primary dimensions of empowering leadership relate to sharing or providing autonomy to followers, and involving followers in decision making are not included in the dimensions which compose transformational/charismatic leadership (Ahearne et al., 2005; Arnold et al., 2000). Moreover, while empowering leadership distinguish accurately various dimensions of empowering people, transformational leadership doesn't enable that

accuracy.

The concept of ethical leadership is mainly focuses on leaders' orientation regarding doing what is right, being fair, having integrity, and guiding others in an ethical manner by communicating about ethics, ethical rules, and rewarding ethical behaviors of subordinates (Brown & Treviño, 2006; Den Hartog, 2015; Dionne et al., 2014; Hassan, Mahsud, Yukl, & Prussia, 2013; Palanski & Yammarino, 2009). Although it may be desirable for empowering leaders to be grounded on an ethical foundation, empowering leader's orientation is not centered on ethical issues. Not all leaders that are ethical are necessarily empowering leaders.

Due to the nature of empowering leadership, in the literature this construct has been studied by many authors to explain organizational effectiveness (Conger & Kanungo, 1988; Gecas, 1989; Lawler, 1986; Manz & Sims, 1987; Thomas & Velthouse, 1990). Diverse authors have highlighted how this type of leadership can be linked to positive organizational outcomes and followers' well-being (Arnold, Arad, Rhodes & Drasgow, 2000; Arad & Drasgow, 1994).

Leaders who adopt empowering leadership behaviors are likely to exert a positive influence on team's motivation (Chen, Sharma, Edinger, Shapiro & Farh, 2011). On an individual level, career self-efficacy and career satisfaction are influenced by empowering behaviors (Biemann, Kearneyb & Marggraf, 2015). Furthermore, empowering leadership is likely to have a strong impact on psychological empowerment, which is connected with intrinsic motivation and also with creative process engagement (Zhang & Bartol, 2010).

The empowering leadership model designed by Arnold and collaborators can be useful for assessing leadership effectiveness (Arnold, Arad, Rhoades, & Drasgow, 2000). This leadership model is focused on promoting and developing subordinates (Arnold et al., 2000). This model is composed by several dimensions which contribute to the global score of empowering leadership. Each dimension has a specific meaning and account for a specific aspect. The behaviors required for an effective empowering leader are encompassed in this model (Arnold et al., 2000).

The Portuguese version of this scale was validated by Serrano (2014) and Salvador (2017). This version contemplates the five dimensions of leadership behavior highlighted in the original scale of Arnold and collaborators (2000): (1) Leading by example, refers to a set of behaviors that show the leader's commitment to their own work as well as the work of their team members; (2) Participation in decision-taking, refers to a leader's use of team members' information and input in making decisions. This category included behaviors such as encouraging team members to express their ideas and opinions; (3) Coaching, refers to a set of behaviors that educate team members and help them to become self-reliant; (4) Informing,

refers to the leader's dissemination of company wide information such as mission and philosophy as well as other important information. This category included behaviors such as explaining company decisions to the team and informing the team about new developments in organizational policy; (5) Showing concern, is a collection of behaviors that demonstrates a general regard for team members' well-being. This category includes behaviors such as taking time to discuss team members' concerns. These dimensions are important to understand the profile of the empowering leader and to create a stimulating environment for the workers (Arnold et al., 2000).

The other type of leadership included in our research is toxic leadership. A toxic leader shows neglect for the subordinates' well-being and can also be harmful or abusive (Lipman-Blumen, 2005; Schmidt, 2008) expresses lack of empathy for others, desire to enhance his/her self-image and need to be viewed in a positive way by others (Schmidt, 2008). Leaders are considered toxic when they inflict harm on their followers by using influence tactics that are extremely harsh and exhibit destructive behaviors that work to decay their followers' motivation and self-esteem (Lipman-Blumen, 2005). It is precisely because of the description of this leadership type as opposed to the empowering leadership concept that it was included in the present research. While the overall concept is expected to influence negatively outcomes as work motivation, the various dimensions can have different influences when combined with the different dimensions of empowering leadership.

Toxic leadership

Most studies have focused more on the effective and positive aspects of leadership than on the destructive ones, although we discerned an increase in studies examining toxic leadership (Pelletier, 2010). Toxic leadership is a construct that in the literature can be found in relation to some organizational outcomes, such as subordinate performance (Einarsen, Aasland, & Skogstad, 2007; Krasikova, Green, & LeBreton, 2013), organizational citizenship (Bligh, Kohles, Pearce, Justin, & Stovall, 2007) and workplace deviance (Burton & Hoobler, 2011; Martinko, Harvey, Brees & Mackey, 2013; Tepper, 2007).

Toxic leaders have a direct influence on subordinates in the workplace (Avolio, Gardner, Walumbwa, Luthans & May, 2004; Ferris, Zinko, Brouer, Buckley & Harvey, 2007). Researchers have proposed descriptions of harmful leadership, like the tyrannical (Ashforth, 1994), destructive (Einarsen, Aasland & Skostad, 2007), unethical or bad (Kellerman, 2004), and toxic (Lipman-Blumen, 2005; Pelletier, 2010; Reed, 2004). There are behavioral overlaps

within these theories, but there are also behaviors that are unique to each conceptual framework (Pelletier, 2010). Tyrannical leaders are distrusting, condescending, arrogant, rigid, and inflexible, while destructive leadership is defined as “the systematic and repeated behavior by a leader that violates the legitimate interest of the organization by undermining and/or sabotaging the organization’s goals, tasks, resources, and effectiveness and/or motivation, well-being or job satisfaction of subordinates (Einarsen et al. , 2007, p. 208). Bad leadership is characterized by dysfunctional traits that range from ineffective (e.g.,rigidity, callousness) to unethical (e.g., corrupt, evil) (Kellerman, 2004). Hornstein (1996) suggests that the peculiarity of toxic leaders is primarily concerned with gaining and maintaining control through methods that create fear and intimidation.

In our research we are going to focus our attention on the toxic leadership model (Schmidt, 2008). This model includes five dimensions: (1) Abusive Supervision, that is defined by hostile verbal and nonverbal behaviors, excluding physical contact; (2) Authoritarian Leadership, a leader that insist on obedience from subordinates and state control and authority over them; (3) Narcissism, an egotistical leader that is motivated by self-interest; (4) Self-promotion, behaviors that can encourage a positive image of the leader; (5) Unpredictability, uncertainty regarding the behaviors that the leader will show, some attitudes being influenced by the leader’s daily mood.

Both empowering and toxic leadership are defined by the impact on subordinates whether a strengthening or undermining them. It is expected that both leadership types have an overall huge impact of subordinates’ work motivation (Arnold et al., 2000; Schimdt, 2008). That effect was found by Salvador (2017) and Calderaro (2018) which is critical since leaders are asked to lead and motivate followers (Cohen & Bailey, 1997; Hackman, 2002; Kozlowski & Bell, 2003; Chen, Kirkman, Kanfer, & Rosen, 2007).

A leader can be described as a possessor of tools that can create and change the structure and culture within an organization (Nyber et al., 2005). In the literature toxic leadership is linked to negative consequences at organizational level (Burton & Hoobler, 2006; Lian, Ferris & Brown, 2012; Reed, 2004; Tepper, 2007) while empowering leadership with organizational well-being (Arnold, Arad, Rhodes & Drasgow, 2000; Arad & Drasgow, 1994). However, the complex combination of leadership dimensions whether toxic or empowering for studying how they are necessary or sufficient conditions for a subordinate’s work motivation outcome to occur were not addressed so far.

Self-determination theory

Among the many theories of work motivation, we approach it according to the self-Determination theory (SDT). It is considered a macro theory of human motivation that was developed from the research on intrinsic and extrinsic motivations and then expanded to include others areas of research, like work organizations and other domains of life (Deci, Olafsen & Ryan, 2017). Considering the comprehensive and integrative scope of SDT, it provides a useful conceptual tool for organizational researchers (Deci, Olafsen & Ryan, 2017).

Fundamental in the self-determination theory is the distinction between autonomous and controlled motivation (Gagné & Deci, 2005). Autonomous motivation is present in those activities that an individual engages fully volitionally, while controlled motivation is involved in activities where there is a sense of external pressure on the person (Gagné & Deci, 2005). A key driver of motivation set out in self-determination theory is satisfaction of three basic psychological needs: competence, autonomy, and relatedness. The satisfaction of those needs promotes autonomous motivation, high-quality performance, and wellness (Deci, Olafsen & Ryan, 2017).

Self-determination theory overcomes the simple dichotomy between intrinsic and extrinsic motivation (Van den Boreck et al., 2011). This theory postulates that motivation can be seen in a continuum that goes from amotivation to intrinsic motivation and between them there are four types of extrinsic motivation: extrinsic regulation, introjected regulation, identified regulation and integrated regulation (Gagné & Deci, 2005). According to Gagné and Deci (2005), intrinsic motivation is autonomous, while extrinsic regulation can vary in the degree to which is autonomous versus controlled. From the extrinsic regulation, the others type of extrinsic regulations take place when an individual takes values, attitudes, or regulatory structures from external contingency and transform them into an internal regulation (Gagné & Deci, 2005). The same authors pointed out that this process is denominated internalization, a process that allows extrinsic motivation to be wholly autonomous and volitional, the more fully it has been internalized, the more autonomous will be (Gagné & Deci, 2005).

According to SDT, internalization is a term that refers to three different processes: introjection, identification, and integration. Introjection, is a regulation that has been taken in by the person but has not been accepted as his or her own, being regulation within the person although in a relatively controlled form of internalized extrinsic motivation (Gagné & Deci, 2005). With identified regulation, people feel greater freedom and volition because the behavior is more congruent with their personal goals and identities, corresponding to a more autonomous

extrinsic motivation (Gagné & Deci, 2005). The last process is integrated regulation describing that the person is interested in an activity by the activity being instrumentally important for personal goals and values. Integrated regulation does not, however, become intrinsic motivation but is still considered extrinsic motivation, an autonomous form of it.

Self-determination theory also suggests that supporting workplace conditions where employees feel sustained in their autonomy will lead to more employee satisfaction, as well as collateral benefits for organizational effectiveness (Deci, Olafsen & Ryan, 2017). Leaders can promote and support those conditions where individuals can accomplish the needs of autonomy, competence and relatedness (Deci, Olafsen & Ryan, 2017).

SDT comprises six mini-theories, each theory addresses one facet of motivation (Deci & Ryan, 1985). In our research, we are taking into consideration the Cognitive Evaluation Theory (CET) that addresses the effects of social contexts on intrinsic motivation and how factors such as rewards impact intrinsic motivation and interest (Deci & Ryan, 2000). The second mini-theory considered in the research is the Organismic Integration Theory (OIT), that is addressed to topic of extrinsic motivation in its various forms, with their properties, determinants, and consequences (Deci & Ryan, 2000). OIT is further concerned with social contexts that enhance or forestall internalization, particularly highlighting supports for autonomy and relatedness as critical to internalization (Deci & Ryan, 2000). Considering that our research aims at examining the conditions (necessary or sufficient in terms of leadership dimensions) for a specific work motivation outcome to occur, we will consider leadership dimensions as those aspects of social context that co-determine both intrinsic and extrinsic work motivation.

The multidimensional conceptualization of motivation offered by SDT can be considered crucial in our research in the process of understanding that different combinations of empowering and toxic leadership dimensions can enhance different types of employees' motivation (Gagné & Deci, 2005). Our review and suggested framework extends the work of Calderaro (2018) and Salvador (2017) who have researched the relationship between empowering leadership, toxic leadership and work motivation. Salvador (2017) found overall significant correlations between autonomous forms of work motivation and both empowering (positive correlations) and toxic leadership dimensions (negative correlations). Calderaro (2018) found similar results. However, none of those authors approach the variables for exploring each leadership construct (and the corresponding dimensions) as necessary or sufficient conditions for work motivation dimensions to occur. Moreover, while they were seeking general patterns of relationships between variables, the possibility of different processes to be functioning was not verified. It is argued in the present research that different individuals

might cope differently with the toxic leadership dimensions, and also show differences in the way they manage empowering leadership. Contributing to understanding that is just the purpose of the present research.

The following table (Table 1) is a synthesis of the main concepts explained in the above section.

Table 1.

Synthesis of the main concepts

<i>Concept</i>	<i>Definition</i>	<i>Dimensions</i>
<i>Empowering leadership</i>	A leadership style based on encouraging and fostering employees to head and manage themselves (Tuckey, Dollard & Baker, 2012).	<ol style="list-style-type: none"> 1. <i>Lead by example</i> 2. <i>Participation in decision taking</i> 3. <i>Coaching</i> 4. <i>Informing</i> 5. <i>Showing concern</i>
<i>Toxic leadership</i>	A leadership style based on destructive behaviors that work to decay their followers' motivation and self-esteem (Lipman-Blumen, 2005)	<ol style="list-style-type: none"> 1. <i>Self-promotion</i> 2. <i>Abusive supervision</i> 3. <i>Unpredictability</i> 4. <i>Narcissism</i> 5. <i>Authoritarian leadership</i>
<i>Self-determination theory</i>	A theory of motivation that postulates a multidimensional conceptualization of motivation, that can be seen in a continuum that goes from amotivation to intrinsic motivation and between them there are four types of extrinsic motivation. (Gagné & Deci, 2005).	<ol style="list-style-type: none"> 1. <i>Amotivation</i> 2. <i>Extrinsic social regulation</i> 3. <i>Extrinsic material regulation</i> 4. <i>Introjected regulation</i> 5. <i>Identified regulation</i> 6. <i>Intrinsic</i>

Aim of the study and contribution to the knowledge

The aim of this study is to identify and describe configurations of leadership dimensions, empowering and toxic, that are necessary and sufficient conditions for the different outcomes to occur, in terms of work motivation types. The present research intends to deepen the understanding of that relationship between leadership and work motivation.

Furthermore, we expect to demonstrate the added value that fuzzy set qualitative comparative analysis can bring to the study of how elements of a configuration are connected to specific outcomes. Specifically, in our study, how different elements of leadership combine when specific work motivation outcomes occur. Fuzzy set qualitative comparative analysis can show those conditions that are necessary and/or sufficient for work motivation. This approach is based on a fully interactive models that take all possible configurations into account (Fiss, 2011). Fuzzy set QCA it is a holistic approach, since each individual case is considered as a complex entity, thus, QCA is in essence a case-sensitive approach (Rihoux, 2006). For our research this feature of this approach can be consider as a strength. The theoretical contribution of this paper will be to identify and describe configurations of leadership dimensions leading to different work motivation outcomes. Furthermore, to characterize the psychological processes for dealing with the different social contexts (in terms of leadership dimensions) that are behind each outcome for a specific subsample of individuals.

This is a cross-sectional and self-report study. Gaining knowledge about different processes that operate in the relationship between leadership and work motivation can thus help organizations to design practices related to positive outcomes. At the same time, this study is relevant for leaders. Having a clear idea of their leadership style and the corresponding consequences can help them to judge what can be improved. They can adjust their leadership style in order to better perform their role.”

Method

Participants and procedure

The sample is made up of 408 Portuguese workers. We used a non-probability convenience sampling. The parameters of inclusion were: being a worker in Portugal from any field for at least three months in an organization with minimum nine coworkers and being involved as a worker in a hierarchical relationship with a superior for at least three months. The parameters of time were established to obtain a sample of workers with experience as subordinate with their

leader for having a defined idea of them (about their direct manager, supervisor) and enough work experience in that job for being aware of their work motivation.

The sample was composed at first by 411 participants, then three participants were excluded for missing answers at different items. The sample, previously described by Mónico, Salvador, dos Santos, Pais and Semedo (2019), is composed by 233 women (57.1%) and by 174 men (42.6%). Regarding the age of the participant, the average is 38.9 years old, the age range goes from 18 years old until 76 years old. Regarding the participants' academic level, 38% affirmed to have the high school diploma, only 1.5% affirmed to know to read and write and the other 34.1% declared to have a university academic formation. The 69.1% of the participants are workers of the private industry, while the 30.4% work for the public sector. The participants were also working in organizations with different size in relation to the number of employees. The 31.6% worked in an organization with a range of employees from 10 to 50, the others were in organizations with a range between 51 and 250 employees. Concerning the role of the participants in the organizations, 76.2% referred to don't play a leadership role in the organization.

Data collection was undertaken by psychology students enrolled in a research methods course of a Portuguese public university. After being taught carefully regarding technical and ethical procedures of collecting data, they were asked to apply the research protocol to workers from their network which included an informed consent. They were also asked to fill in a report on the application of the instruments and to sign a responsibility term. Ethical approval was obtained previously from the ethical committee of the public university. Emphasis was put into the quality of data collection for guaranteeing the reliability of data. Since the same data was used previously by Salvador (2017) and Mónico et al. (2019) in other subprojects, a detailed description of it can be found in those studies.

Measures

Three instruments were applied: (a) Toxic Leadership Scale (TLS; Schmidt, 2008), Empowering Leadership Questionnaire (ELQ; Arnold, Arad, Rhoades, & Drasgow, 2000), Multidimensional Work Motivation Scale (MWMS; Gagné et al., 2015) and a sociodemographic questionnaire. We used instruments that were already validated in Portugal in previous research.

The Portuguese version of the TLS scale was previously validated by Mónico et al. (2019) it's composed by the five dimensions elicited by Schmidt (2008): abusive supervision (7 items), authoritarian leadership (6 items), narcissism (5 items), self-promotion (5 items), and

unpredictability (7 items). The TLS is a Likert-type scale response, ranging from "I totally disagree" (1 = my leader is not at all like that) and "I totally agree" (6 = my leader is exactly like that). Each of the five scales has high reliability (Abusive Supervision: $\alpha = 0.93$, Authoritarian Leadership: $\alpha = 0.89$, Narcissism: $\alpha = 0.88$, Self-Promotion: $\alpha = 0.91$, Unpredictable Leadership: $\alpha = 0.92$) (Mónico et al., 2019).

The Portuguese version of the ELQ scale was previously validated by Mónico et al., (2019) and Serrano (2014). This instrument measures the perception of empowering leadership. It is a five-point Likert scale ranging between "Never" (1 = the leader never behaves like this) and "Always" (5 = the leader behaves always like this). This instrument comprises 38 items, grouped into five dimensions, namely: lead by example, participation in decision-taking, coaching, informing, and showing concern. In this scale, there is an inverse item, the item 11 of participation in decision-taking. For all five scales reliability is acceptable (higher than $\alpha = 0.85$) (Mónico et al., 2019).

The third instrument that we use in our research is the Portuguese version of the Multidimensional Work Motivation Scale (MWMS) (Gagné et al., 2015). The MWMS (19 items) assesses distinct motivation types (Amotivation, External Regulation, External Material Work Motivation, External Social Work Motivation, Introjected Regulation, Identified Regulation, and Intrinsic Regulation). Regarding the form of response to the MWMS items, it is a seven-point Likert-type scale ranging between "Nothing" (1 = the affirmation does not apply to me) and "Completely" (7 = the affirmation completely applies to me). The Portuguese version of the MWMS was previously validated by dos Santos et al. (2017).

The last questionnaire that participants had to fill in, was the sociodemographic questionnaire. In this questionnaire participants had to indicate the sex, the age, the academic level, the seniority in the organization and in which field they were working. Additional information regarding their role in the organization and the amount of the salary was collected.

Data analysis

Concerning data treatment, in this research we propose to analyze empowering and toxic leadership dimensions and work motivation through fuzzy-set qualitative comparative analysis (fsQCA), a technique which evaluates how conditions may be necessary and/or sufficient for a given outcome (Wagemann & Schneider 2010). While quantitative methods aim to find cause-effect relations between dependent and independent variables, this particular qualitative method, fits the causes-of-effects approach, because aims to reveal the minimal conditions

bringing about a particular outcome in specific cases (Vis, 2012).

This approach is based on the idea that causal relations rather than be considered correlations are habitually better understood in terms of set-theoretic relations (Fiss, 2007; Ragin, 1987, 2000, 2008). We use fuzzy set analysis as a corresponding method for more clearly understanding what elements of a configuration are relevant for an outcome (Fiss, 2011) and how these elements, in our case the leadership dimensions, combine to achieve their effects on work motivation. A specific configuration may correspond to several observed cases (Rihoux, 2006). Moreover, the necessary and sufficient conditions for each specific outcome will be interpreted as a psychological process.

FsQCA allows for asymmetry (Fiss, 2011). Asymmetry implies that a condition and any solution term always refer to one of the two qualitative states, presence or absence (Schneider & Wagemann, 2012). According to the same authors, in set-theoretic methods, the presence of a set and its negation denote two qualitatively different phenomena. This methodology permit to examine the necessary and sufficient conditions in a detailed way (Fiss, 2011). Another advantage of fuzzy sets it's the fact that a specific condition (or a specific combination of conditions) may be sufficient to produce the outcome of interest (Rihoux, 2006).

With fuzzy-set Qualitative Comparative Analysis the variables need to be calibrated, since it's not adequate to use the original data. The calibration of all the conditions and all the outcomes is based on the definitions of Ragin (2008) who defines a range between 0 (fully out) and 1 (fully in) where .5 is the median (neither in nor out). Ragin (2008) defines "fully in" set by the 95th percentile while the "fully out" set as the 5th percentile and the "neither in nor out" is defined by the median. This criterion would be applied where no other theoretical or empirical approach is adequate for the variable's calibration. Therefore, in our study the calibration was undertaken based on theoretical cut-off points, i.e., the meaning of the Likert scale points of each instrument used for measuring the variables. For the outcome variables (work motivation dimensions) six and seven were considered high values (cut-off point = 6); three, four and five were considered medium values (cut-off point = 4); and one and two were considered low values (cut-off point = 2). For the variables which define the conditions (necessary and sufficient) a similar procedure was made based on the meaning of the Likert scale points used. The following cut-off points were considered: Toxic leadership dimensions (high = 4; medium = 3; low = 2); Empowering leadership dimensions (high = 5; medium = 3.5; low = 2). The table 2 presents the calibration of the outcomes and of the leadership dimensions.

Table 2.

Calibration of the outcomes and leadership dimensions.

	Fully in	Neither in nor out	Fully out
Outcomes	6	4	2
Toxic leadership dimensions	4	3	2
Empowering leadership dimensions	5	3.5	2

Each outcome originates a corresponding set of necessary conditions and sufficient conditions. Considering the number of conditions of the study, we decide to analyze the parsimonious solution since it allows us to get a more interpretable result. Most of the studies in management and economics that use fsQCA often use the intermediate solution. However, in the present study its novelty and the fact that we are using complex and a high number of variables for defining the necessary and sufficient conditions for each specific outcome, the intermediate solution would be too complex and hard to interpret. According to Baumgartner and Thiem (2017), usually the parsimonious solution includes solutions which are integrated in intermediary and complex solutions. Therefore, it seems to be more robust.

Two values are taken in consideration about necessary conditions, the consistency and the coverage. Consistency is the percentage of cases from those who get the specific outcome under analysis to whom that condition applies. Consistency, can range from 0 to 1, measures “the degree to which instances of an outcome agree in displaying the causal condition” (Ragin, 2008, p. 44). We have decided to use the cut-off point of .8 (corresponding to 80%). Coverage indicate the percentage of cases that take a given path to the outcome (Fiss, 2011).

Sufficient conditions focus on to what extent the outcome is reached where the specific condition is present. However, the same outcome may occur in presence of other conditions. As said by Ragin (2006, p. 235), “a causal condition can be considered sufficient to lead to the outcome if, for each case, the fuzzy membership value of the causal condition X do not exceed the fuzzy membership value of the outcome Y”. The cut-off point for the sufficient condition is .85 of the consistency, which indicates the degree of belonging to the specific combination as a sub-set of results. Raw coverage is the percentage of positive cases explained by the proposed combination of conditions. The unique coverage is the percentage of positive cases only explained by the proposed combination and no other.

The results will be interpreted as psychological processes that apply to the subsample corresponding to the necessary or sufficient conditions being analyzed. Since our outcome are

the different types of work motivation, we will follow the sequence that goes from amotivation to intrinsic motivation. Each work motivation type will be analyzed firstly in terms of necessary, and then sufficient conditions. Only solutions above the stated cut-off point 0.80 (for necessary conditions) and 0.75 (for sufficient conditions) will be examined for tentative interpretation.

Results and discussion

This section is organized as follows: a) the frequency of participants concerning each outcome; b) the description of necessary and sufficient conditions for each outcome.

Regarding the frequency of participants for each the outcomes Tables 3.1, 3.2, 3.3, synthesize the results. From the first frequency table (Table 3.1) we can quickly identify information such as the fact that 273 participants (66.91% of the participants) have reached low scores in amotivation, and the highest number of participants, 276 (67.65 % of the participants), have reached high scores in the variable identified regulation.

Table 3.1

Frequency of participants per outcome

Scores → Outcomes	Low	Medium	High
Amotivation	273 66.91 %	64 15.69 %	71 17.40 %
External social regulation	140 34.31 %	159 38.97 %	109 26.72 %
External material regulation	59 14.46 %	207 50.74 %	142 34.80 %
Introjected regulation	22 5.39 %	207 50.74 %	179 43.87 %
Identified regulation	10 2.45 %	122 29.90 %	276 67.65 %
Intrinsic	23 5.64 %	192 47.06 %	193 47.30 %

The table 3.2 shows that the majority of the participants scored their leaders high in each dimension regarding empowering leadership: lead by example (226 participants), participation in decision taking

(201 participants), coaching (195 participants), informing (206 participants) and showing concern (217 participants).

Table 3.2

Frequency of participants per empowering leadership conditions

Scores → Dimensions	Low	Medium	High
Lead by example	81 19.85 %	101 24.75 %	226 55.39 %
Participation in decision taking	82 20.10 %	125 30.64 %	201 49.26 %
Coaching	89 21.81 %	124 30.39 %	195 47.79 %
Informing	81 19.85 %	121 29.66 %	206 50.49 %
Showing concern	66 16.18 %	12 30.64 %	217 53.19 %

In the last frequency table (Table 3.3) we can identify information such as the fact that 264 participants (64.71 % of the participants) scored their leader low in abusive supervision, and 78 participants (19.12 % of the participants), scored their leader high in the variable narcissism.”

Table 3.3

Frequency of participants per toxic leadership conditions

Scores → Dimensions	Low	Medium	High
Self-promotion	244 59.80 %	124 30.39 %	40 9.80 %
Abusive supervision	264 64.71 %	114 27.94 %	30 7.35 %
Unpredictability	209 51.23 %	146 35.78 %	53 12.99 %
Narcissism	177 43.38 %	153 37.50 %	78 19.12 %

Authoritarian leadership	192 4.06 %	179 43.87 %	37 9.07 %
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Considering the necessary conditions of the outcome variable *Amotivation*, Table 4 shows the consistency and coverage of each condition tested.

In order to increase audiences, the designation of conditions in the study, is presented in a full way and not the traditional nomenclature of the fsQCA.

Table 4.

Analysis of the necessary conditions for the outcome variable amotivation

Conditions tested	Consistency	Coverage
Lead example	.743659	.113324
Absence Lead example	.496650	.155047
Particip decision	.723793	.120167
Absence Particip decision	.601964	.160857
Coaching	.727862	.116957
Absence Coaching	.539733	.152375
Informing	.691242	.112312
Absence Informing	.594784	.164722
Show concern	.771902	.119537
Absence Show concern	.520585	.157369
Self promotion	.454525	.183745
Absence Self promotion**	.829586	.113770
Abusive supervision	.473912	.237097
Absence Abusive supervision**	.861659	.110943
Unpredictability	.527527	.174824
Absence Unpredictability	.788657	.116873
Narcissism	.548111	.150253
Absence Narcissism	.756584	.123675
Authoritarian leadership	.493060	.188179
Absence Authoritarian Leadership**	.847058	.118548

Note: **= cut off for necessary conditions: .80

According to Fiss (2011), .80 is understood as the cut-off of consistency for a solution to be considered necessary. Analysis of the Table 2, shows that the conditions Absence of Abusive supervision, Absence of Authoritarian leadership and Absence of Self-promotion are the only three conditions whose consistency is higher (or equal) than .80, which means that they can be considered necessary conditions for amotivation to take place.

This result shows that amotivation for the corresponding subsamples has the necessary

condition of having a leader that doesn't promote him/herself (absence of self-promotion), or a leader that doesn't engage verbal and non-verbal hostile behaviors (absence of abusive supervision) and a leader that doesn't insist on obedience with the subordinates (absence of authoritarian leadership). All the characteristic previously cited are toxic leadership dimensions.

From this result we can infer that in the absence of a toxic leader in the mentioned dimensions, some subordinates are more focused on their work motivation instead of overwhelmed by the leader toxicity. The corresponding subsamples of workers don't need to put energy in coping with the leader toxicity regarding self-promotion, abusive supervision or authoritarian leadership. The fact that the necessary conditions for amotivation are the absence of those toxic leadership dimensions allows us

to infer that some workers under toxic leadership change their focus from worried about their work motivation to worry about the toxic leader behaviors. The human needs behind work motivation are relatedness, autonomy and competence (Deci & Ryan, 2000). The understanding that work doesn't provide those needs fulfilment either directly through intrinsic regulation, or indirectly through extrinsic regulation requires the absence of toxic leadership dimensions the worker should otherwise be coping with. Considering the consistency scores, it is clear that the three conditions although considered independently overlap in great extent. Therefore, the joint interpretation seems to be legitimate as long as the necessary conditions are all toxic leadership dimensions. No sufficient conditions were found for this outcome.

Our second analysis was undertaken having the variable extrinsic social regulation as the outcome. We evaluate for this variable, the necessary conditions (Table 5).

Table 5.

Analysis of the necessary conditions for the outcome variable extrinsic social regulation

Conditions tested	Consistency	Coverage
Lead example**	.819285	.366926
Absence Lead example	.349865	.321003
Particip decision	.789315	.385138
Absence Particip decision	.421613	.331115
Coaching	.824660	.389447
Absence Coaching	.351738	.291843
Informing	.801368	.382671
Absence Informing	.384232	.312739
Show concern	.837202	.381037
Absence Show concern	.352145	.312857
Self promotion	.323234	.384033
Absence Self promotion	.837609	.337600
Abusive supervision	.270136	.397199
Absence Abusive supervision	.884519	.334710
Unpredictability	.408257	.397635
Absence Unpredictability	.776610	.338240
Narcissism	.483670	.389671
Absence Narcissism	.710726	.341445
Authoritarian leadership	.483670	.389671
Absence Authoritarian Leadership	.730524	.352447

Note. ** = cut off for necessary conditions: .80

For the outcome variable extrinsic social regulation, four necessary conditions were found, considering the cut-off point of .80. Taking into account the necessary conditions of the empowering leadership (presence of leads by example, presence of coaching, presence of informing, and presence of shows concern) they suggest a leader is a relevant person to subordinates of the corresponding subsamples as a provider of extrinsic social rewards. Subordinates desire to receive attention, guidance, approval and esteem from the leader and avoid being criticized by that leader. The psychological process operating in the situation is similar for the four conditions, with small differences regarding the greater importance given to follow a good example, receive coaching, being informed or receiving concern from the leader. Since the subsamples are partially overlapped the

same processes seems to be activated in most individuals.

It seems that for the corresponding subsamples, the leader has a central role in providing those social rewards, and therefore it is a necessary condition the leader is not that self-centered being able to provide the mentioned social rewards. Taking into account that the necessary conditions do not apply to the whole sample, it could be considered that workers can get social rewards from several sources, being one of them the leader. As the Organismic Integration Theory (OIT) states, different social contexts can enhance or forestall internalization (Deci & Ryan, 2000).

Once again, no sufficient conditions for this outcome variable were found. Considering that the solution consistency it's less than .75, it's too low to accept those conditions (Fiss, 2011). Subsequently we analyzed the necessary conditions for the outcome variable extrinsic material regulation (Table 6).

Table 6.

Analysis of the necessary conditions for the outcome variable extrinsic material regulation

Conditions tested	Consistency	Coverage
Lead example	.774398	.526462
Absence Lead example	.363056	.505641
Particip decision	.713558	.528512
Absence Particip decision	.455497	.543012
Coaching	.768818	.551133
Absence Coaching	.387682	.488276
Informing	.767531	.556351
Absence Informing	.392564	.485019
Show concern	.779173	.538308
Absence Show concern	.377810	.509514
Self promotion	.324052	.584422
Absence Self promotion**	.815602	.498999
Abusive supervision	.270293	.603281
Absence Abusive supervision**	.853426	.490215
Unpredictability	.404367	.597842
Absence Unpredictability	.741671	.490335
Narcissism	.462847	.566039
Absence Narcissism	.692151	.504754
Authoritarian leadership	.365792	.622819
Absence Authoritarian Leadership	.798541	.498576

Note: ** = cut off for necessary conditions: .80

As had emerged during the analysis of the variable extrinsic social regulation, also in the analysis of the extrinsic material regulation we can find two necessary conditions. Both the conditions delineate the absence of two toxic leadership dimensions, abusive supervision and

self-promotion. As for the extrinsic social regulation one subsample show the absence of self-promotion is a necessary condition for extrinsic material regulation and another show the absence of abusive supervision as a necessary condition for the same outcome. The extrinsic material rewards are often dependent on the direct manager or supervisor. Therefore, this result can be explained by the central role of that leader in deciding about remuneration and other material benefits in the corresponding subsamples. The leader motivate employees' persistence and performance through external rewards and incentives (Steers, Mowday & Shapiro, 2004), for this reason, the leader is required to show no self-centered behaviors as expressed in abusive supervision or in self-promotion. Among the individuals not included in both subsamples it is possible that situational variables are more determinants of the material rewards, as is the case of public administration or other highly regulated occupations. Consequently, the leader toxicity has less influence on the material rewards that workers get from their work.

Table 7 presents the evaluation of the necessary conditions for the outcome variable introjected regulation.

Table 7.

<i>Analysis for the necessary conditions for the outcome variable introjected regulation</i>		
Conditions tested	Consistency	Coverage
Lead example	.775962	.708320
Absence Lead example	.325808	.609280
Particip decision	.726336	.722352
Absence Particip decision	.397171	.635753
Coaching	.752667	.724472
Absence Coaching	.362289	.612676
Informing	.746474	.726530
Absence Informing	.370200	.614146
Show concern	.771287	.715482
Absence Show concern	.349423	.632733
Self promotion	.296560	.718142
Absence Self promotion**	.803253	.659872
Abusive supervision	.247453	.741588
Absence Abusive supervision**	.847005	.653271
Unpredictability	.370640	.735782
Absence Unpredictability	.736685	.653957
Narcissism	.428977	.704416
Absence Narcissism	.685060	.670801
Authoritarian leadership	.325049	.743126
Absence Authoritarian Leadership**	.802174	.672495

Note: * = cut off for necessary conditions: .80

According to the results presented in Table 7, the outcome introjected regulation shows to have

absence of self-promotion, absence of abusive supervision and absence of authoritarian leadership as necessary conditions in three subsamples. Considering that introjected regulation is related to the worker becoming proud and avoiding shame, one more time it seems that the leader has a central role in enabling workers to get that in the three subsamples. Others like family members and colleagues may have also a central role in enabling the emergence of proud and shame in other subsamples but the results suggest that in the three subsamples the leader is required to behave without authoritarian, abusive or self-promoting leadership. Through that, the leader enables the internalization of values, attitudes, and regulatory structures as described by Gagné and Deci (2005). Introjected regulation represents the first step in the adaptive process of the internalization of behavior (Vansteenkiste et al., 2015), and thus may play a pivotal role in how workers deal with leaders that present the toxic dimensions above mentioned.

For the variable introjected regulation were also analyzed the sufficient conditions (Table 8).

Table 8.

Analysis for the sufficient conditions for the outcome variable introjected regulation- parsimonious solution

Conditions tested	Raw coverage	Unique coverage	Consistency
Lead example*Absence Show concern	.209693	.005394	.765014
Particip decision*Absence Coaching	.194390	.004156	.783035
Abusive supervision*Absence Narcissism	.115475	.002318	.880561
Informing*Narcissism	.302833	.052224	.850615
Absence Coaching*Absence Informing*Show Concern	.161306	.001958	.775304
Particip decision*Absence Show concern	.196468	.002078	.827081
Self promotion* Absence Authoritarian Leadership	.199104	.002318	.854717
Self promotion*Absence Abusive Supervision	.211691	.000759	.814199
Absence Abusive supervision*Unpredictability	.266792	.004555	.830265
Absence Self promotion*Unpredictability	.249450	.005714	.864681
Absence Unpredictability* Authoritarian Leadership	.200143	.007872	.861689
Lead example*Absence Particip decision *Informing	.199145	.000160	.827769
Absence Particip decision*Coaching*Informing	.201143	.000280	.831791
solution coverage: .562672			
solution consistency: .751000			

Note: Cut off for sufficient conditions: .75

Considering that the global solution consistency is .75, we can take into considerations the

sufficient conditions of this variable. Looking for the unique coverage, the set of combinations that seems the most important is the presence of informing and narcissism simultaneously (Table 8). This results shows how a toxic dimension, narcissism, can coexist with an empowering dimension, informing for jointly make a sufficient condition of introjected regulation in a subsample. In this condition we can see how the toxicity of a narcissist leaders is overcome by the capability of informing subordinates about organizational developments. In this subsample it is possible the informing dimension contributes to the workers feel the narcissism in a positive way.

Table 9.

Analysis of the necessary conditions for the outcome variable identified regulation

Conditions tested	Consistency	Coverage
Lead example	.748439	.901010
Absence Lead example	.306217	.755212
Particip decision	.692419	.908166
Absence Particip decision	.378052	.798081
Coaching	.719444	.913273
Absence Coaching	.346270	.772282
Informing	.712294	.914288
Absence Informing	.357238	.781586
Show concern	.739380	.904555
Absence Show concern	.326880	.780624
Self promotion	.253529	.809676
Absence Self promotion**	.803520	.870540
Abusive supervision	.208719	.824931
Absence Abusive supervision**	.848027	.862584
Unpredictability	.310974	.814151
Absence Unpredictability	.752014	.880396
Narcissism	.376507	.815366
Absence Narcissism	.683209	.882272
Authoritarian leadership	.276586	.833927
Absence Authoritarian Leadership	.793340	.877131

Note: **= cut off for necessary conditions: .80

In the Table 9 the results of the necessary conditions for the outcome variable identified regulation are presented. It's remarkable that the necessary conditions for identified regulation are the absence of self-promotion or the absence of abusive supervision in the corresponding subsamples. Looking at the coverage of the two conditions highlighted, they are both representative of almost 87% of the individuals and consequently have a great subsamples overlap.

Among the corresponding subsamples, the leader that doesn't ridicule their employee or doesn't self-promote him/herself enables subordinates to be willing to identify to the tasks that they do in an autonomous way. For those subsamples, the leader seems to have a role in avoiding being a barrier for the importance of the job for subordinates. Going further, the leader can have a central role in making meaning of the subordinates' jobs. That role of making the reality of the others through sensemaking was highlighted by Smircich and Morgan (1982).

Table 10.

Analysis of the sufficient conditions for the outcome variable identified regulation- parsimonious solution

Conditions tested	Raw coverage	Unique coverage	Consistency
Lead example	.748439	.040659	.901010
Informing	.712294	.023541	.914288
Show concern	.739380	.017633	.904555
Self promotion* Absence Authoritarian Leadership	.162364	.007938	.919211
Absence Self-promotion*Unpredictability	.197873	.005817	.904571
Absence Unpredictability*Narcissism	.228291	.010665	.922050
solution coverage: .907956			
solution consistency: .876027			

Note: Cut off for sufficient conditions: .75

The sufficient conditions considered for identified regulation are those ones with the consistency higher than .75 and unique coverage higher than .01. The three subsamples have three sufficient conditions: lead by example, informing, and show concern, all of them empowering leadership dimensions. Considering the first one, lead by example, one possible explanation is that within the corresponding subsample the leader takes strongly a role model and promotes the identification with the job highlighting the values behind that work. Giving the example is powerful enough for workers to identify with those values and the importance of the tasks. The workers feel encouraged by the leader giving example. The second sufficient condition, informing, may work differently within the corresponding subsample. Since workers are often informed regarding the broader context of their roles, they have conditions for understanding the meaning of what they do and strengthen their identified work motivation. The third sufficient condition, the leader showing concern, can be explained through the relatedness need satisfaction that is fostered by the leader's behavior. Through being concerned with the subordinates the leader makes them to feel understood and appreciated, reinforcing the feeling of being treated as a human being who deserves consideration. Therefore, they identify easier with their work.

Table 11.*Analysis of the necessary conditions for the outcome variable intrinsic regulation*

Conditions tested	Consistency	Coverage
Lead example	.780200	.787030
Absence Lead example	.306396	.633191
Particip decision	.741982	.815458
Absence Particip decision	.367574	.650208
Coaching	.754999	.803084
Absence Coaching	.340890	.637070
Informing	.751889	.808703
Absence Informing	.356185	.652990
Show concern	.776910	.796434
Absence Show concern	.323752	.647855
Self promotion	.261561	.699952
Absence Self promotion**	.825180	.749122
Abusive supervision	.213942	.708538
Absence Abusive supervision**	.869002	.740670
Unpredictability	.311133	.682557
Absence Unpredictability	.780887	.766041
Narcissism	.388943	.705794
Absence Narcissism	.703185	.760906
Authoritarian leadership	.283436	.716087
Absence Authoritarian* Leadership	.820262	.759924

Note: = cut off for necessary conditions: .80

Considering the outcome intrinsic regulation (Table 11, cut off for consistency = .80), three conditions satisfied this parameter: Absence of self-promotion, absence of abusive supervision, and absence of authoritarian leadership. Regarding the subsample of the first necessary condition, the undermining effect of self-promotion on intrinsic regulation emerges. In these workers, intrinsic regulation requires that the leader doesn't show self-promotion. A leader that is focus on promoting him\herself would not dedicate enough time in encouraging subordinates in managing themselves. Likewise, among the workers of the second subsample, the abusive supervision undermines the pleasure they have in performing the tasks and only in absence of abusive supervision they can regulate autonomously (intrinsic work motivation). A similar process can work for the third subsample concerning authoritarian leadership. Cognitive Evaluation Theory highlight how external pressures, based on tyrannical and authoritarian behaviors, can undermine intrinsic regulation (Deci & Ryan, 2000). The three basic needs

stated by the self determination theory (relatedness, competence and autonomy) (Deci & Ryan, 2000) seems to be met in the corresponding subsamples, through performing their jobs. The absence of Authoritarian leadership, Absence of self-promotion and Absence of abusive supervision may enable that process. Taken together, it is likely the three subsamples partially overlap and that most of workers are common to all of them. However, only further studies can clarify to what extent that is true.

Table 12.

Analysis for the sufficient conditions for the outcome variable intrinsic regulation- parsimonious solution

Conditions tested	Raw coverage	Unique coverage	Consistency
Lead Example	.780200	.035940	.787030
Informing	.751889	.021224	.808704
Show concern	.776910	.013957	.796434
Self-promotion*Absence Authoritarian Leadership	.169866	.007014	.805831
Absence Self-promotion*Unpredictability	.209025	.002459	.800692
Absence Unpredictability*Narcissism	.246266	.009148	.833454
solution coverage: .928409			
solution consistency: .750592			

Note. Cut off for sufficient conditions: .75

Sufficient conditions for intrinsic work motivation (Table 12) are similar to those found for identified regulation. That could be consequence of the closeness of both concepts. Three subsamples were found regarding *lead by example*, *informing* and *show concern*. Once again, the explanation can be focused on the importance of empowering dimensions to make the job interesting and intrinsically motivating. Workers from the three subsamples are sensible to seeing the leader as a role model, being informed, and being recognized by the leader who shows concern for them. The possible overlapping among the subsample participants must be taken in consideration. These results confirm in the three subsamples that empowering leadership is associated to foster subordinates' motivation and unlock their potential (Srivastava, Bartol, & Locke, 2006). Through that workers find their jobs interesting and intrinsically motivating.

The analyses confirm the relationship between leadership (empowering and toxic) and work motivation and shows how there are three particular dimensions of toxic leadership (abusive supervision, self-promotion and authoritarian leadership) that contaminate the possibility of motivation outcomes to take place. Concerning sufficient conditions, *lead by*

example, informing and *show concern* are the three dimensions of empowering leadership that emerge as more relevant. Overall, it is interesting to pay attention to the fact that absence of toxic leadership dimensions emerges as necessary conditions of controlled and autonomous types of regulation, while the presence of empowering leadership dimensions emerge as sufficient conditions of more autonomous regulation. The detrimental effect of negative conditions expressed in toxic leadership dimensions is wider since crosses all types of work motivation while the positive effect of empowering leadership dimensions applies only to some of the types of work motivation.

Two specific results deserve to be underlined here: the necessary conditions of amotivation and the sufficient conditions of introjected regulation. Amotivation corresponds to lack of any kind of work motivation for performing the job tasks. The three necessary conditions for amotivation to emerge are the absence of three toxic leadership dimensions, one at a time. Surprisingly, this results are in line with the intrinsic motivation results. Since intrinsic motivation is the more autonomous form of regulation, it is awkward that the same necessary conditions apply to amotivation. Despite of that, our idea is that different processes operate in both outcomes. The absence of abusive supervision and the absence of self-promotion are two necessary conditions for intrinsic regulation since leadership, being part of the content of the subordinates' job, must be clear of the relational injustice behind those concepts. For the amotivated subsample, the absence of that type of toxicity enable them to realize they really are not at all interested in performing their jobs. Our interpretation is that in the three corresponding subsets (or subsamples) the absence of those dimensions enables the focus on the job and the perception of lack of interest, positive material or social reward, as well as any kind of introjected feeling as proud, etc. These results show how sometimes a problem (coping with toxic leadership) turn the psychological energy and attention to that problem and by doing that prevents the psychological energy to be applied in other issues. In the present study we interpret that the three subsamples show this way of functioning. However, we are aware that further studies are required to clarify to what extent this mechanism is real, and what kind of variables are relevant for it to be expressed in the psychological functioning of workers.

The second surprise was the combination of a toxic leadership dimension with an empowering one, narcissism and informing to create a sufficient condition for introjected regulation. That can be the consequence for the corresponding subset of participants, of a soft effect of narcissism when in presence of informing. The narcissistic leader can be accepted by followers and even forgiven for their narcissism as long as the followers are informed regularly on the relevant issues for performing the job. As a kind of gratitude workers may introject the

importance of put energy in performing their roles.

It's important to take into account that FsQCA is an extraordinarily sensitive method whose results are worryingly susceptible to minor parametric and model specification changes (Krogslund, Choi & Poertner, 2015). For this reason, the results of fsQCA may be sensitive face to the calibration options. In this research work the calibration was based on the theoretical definition of the original variables, and not in the percentile approach. Given this, the respective sensitivity analysis was not performed.

Conclusion, implications, limitations and future studies

Leadership plays an important role in fostering employees' work motivation. Due to the continuous new global tendencies, organizations are facing diverse challenges in training leaders to deal with changes. Leaders are asked to manage changes and guide individuals and teams through uncertain environments (Bass, Avolio, Jung, & Berson, 2003). The importance of their role is seen in the possibility to create environment that enables employees to be autonomous motivated and more willing to take risk (Gagné & Deci, 2005).

Considering that different leadership styles exert different results, this research took into consideration two specific leadership styles deepen their relation with work motivation in the organizational context. Along with this lines, the purpose of this paper was to identify and describe sets of empowering leadership (EL) and toxic leadership (TL) dimensions that show to be necessary and sufficient conditions to different types of work motivation to occur, according to the Self- determination theory (SDT).

Self-determination theory (SDT) is arguably the most widely-recognized framework for understanding the dynamics of self-determination at work (Deci & Ryan 1985, 2000; Gagné & Deci 2005; Ryan & Deci 2000, 2002). This theory suited our purpose since distinguish several types of work motivation. This multidimensional conceptualization allows an accurate understanding of the driving forces underlying workers' job behavior.

With fsQCA, that is a case-oriented comparative method, we evaluated how different elements of leadership combine to achieve an outcome in terms of work motivation. Fuzzy sets has the ability to make fine-grained distinctions, but at the same time permits set theoretic operations, and such operations are outside the scope of conventional variable-oriented analysis. The sampling procedure in quantitative research is critical to generalizing the results, but in fsQCA that issue doesn't apply in the same way.

The necessary and sufficient conditions are valid to the specific subsamples and it is only possible to infer that other workers might show a similar process. Several processes which

apply to subsamples were described. For the results an interpretation was provided, and together was reinforced the idea that the same work motivation outcome can be achieved through different psychological processes.

Our results highlighted how leaders that insist on obedience, promote themselves and act with hostile behaviors strongly influence all the different types of work motivation among great number of workers. Remarkably are the results concerning the outcome “amotivation”, that contrarily of the expectation, presented as necessary conditions absence of toxic leaderships dimensions.

In general, while toxic leadership dimensions (mostly self-promotion, abusive supervision, and authoritarian leadership) emerge as necessary conditions for work motivation, empowering leadership dimensions (mostly lead by example, informing and show concern appeared as sufficient conditions for autonomous work motivation (identified and intrinsic regulation) and as necessary conditions for extrinsic social regulation (in this case also with coaching).

Our results are true to the corresponding subsamples but not for the whole sample. It is crucial take into account that several psychological processes underlie the same work motivation outcome. Future studies can help in clarifying dispositional, inter-individual and contextual differences that can play a role in determining which processes are operating in specific situations. Could also be useful to carry out similar studies within other contexts.

From this research organization can infer the importance of evaluating their leaders and make them aware about their impact on employees’ work motivation. Human resource managers must pay attention to the suggestion that the detrimental effect of toxic leadership is wider in scope than the developmental effect of empowering leadership. But at the same time, this study goes beyond the simple differentiation between “good” and “bad” leadership styles. An effective leader can possess characteristics from both empowering and toxic leadership.

Our study presents limitations such as the fact that we relied on self-report survey data, creating the possibility of a common method bias. It is also relevant to consider possible items’ misunderstandings and the influence on results of the social desirability bias.

We can conclude affirming that, through fsQCA this study can open new ways of understanding the concepts involved and can provide new empirical knowledge about the constructs capable of improving the organizational results as well as the quality of life of the workers.

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Annexes

Annex 1- Informed consent



Liderança e Trabalho

CONSENTIMENTO INFORMADO

O projeto “Liderança e Trabalho” é realizado por uma equipa de investigação da Universidade de Évora e da Universidade de Coimbra, pelos seguintes investigadores: Nuno Rebelo dos Santos (nrs@uevora.pt), Andreia Dionísio (andreaia@uevora.pt) e Leonor Pais (leonorpais@fpce.uc.pt). É ainda membro da equipa de investigação o(a) estudante abaixo- assinado(a).

O/A participante abaixo-assinado/a:

- Tem conhecimento de quais são os objetivos do projeto;
- Teve oportunidade de esclarecer as questões que quis colocar;
- Sabe que pode desistir de participar no projeto a qualquer momento durante as respostas às questões;
- Sabe que o seu nome nunca será divulgado pela equipa de investigação (os dados individuais são confidenciais);
- Sabe que pode solicitar uma síntese dos resultados obtidos deixando o seu endereço de email ao/à aplicador/a;
- Mantém a confidencialidade quanto à presente investigação até receber a síntese dos resultados obtidos.

A equipa de investigação compromete-se a:

- Garantir ao participante o carácter voluntário da participação no presente estudo;
- Prestar os esclarecimentos solicitados;
- Utilizar parcimoniosamente o tempo disponibilizado pelo participante;
- Assegurar o anonimato das respostas e a confidencialidade dos protocolos individuais de resposta;
- Utilizar os resultados da investigação apenas para fins de trabalhos académicos e respetivas publicações;
- Apresentar os resultados de forma agrupada, impossibilitando a identificação individual dos respondentes;
- Eliminar da base de dados, constituída pela totalidade das respostas, qualquer elemento identificador do autor de cada resposta.
- Conduzir a investigação de acordo com o Código Deontológico da Ordem dos Psicólogos Portugueses.

Data: ___/___/___

Participante:

Estudante-aplicador:

Investigador responsável:

MWMS (Gagné & Forest et al, 2015) – Instruções

No presente questionário é utilizada a palavra “trabalho” significando tanto as situações de exercício de uma profissão por conta própria, como as situações de emprego por conta de outrem. Responda conforme se aplique à sua situação. Considere que não há respostas certas ou erradas. Interessa que responda conforme se aplica mais ou menos à sua situação. Utilize a seguinte escala de respostas:

- 1=Nada
- 2=Muito pouco
- 3=Um pouco
- 4=Moderadamente
- 5=Fortemente
- 6=Muito fortemente
- 7=Completamente

Coloque uma cruz (X) sobre a sua opção de resposta para cada afirmação. Responda em todas as afirmações considerando a seguinte questão:

Por que motivo você se esforça ou se esforçaria no seu trabalho/emprego atual?

Afirmações:	Respostas						
1-Não me esforço porque na verdade sinto que o meu trabalho é uma perda de tempo	1	2	3	4	5	6	7
2-Eu faço pouco porque penso que este trabalho não é merecedor de esforços	1	2	3	4	5	6	7
3-Eu não sei porque estou neste trabalho, já que é um trabalho inútil	1	2	3	4	5	6	7
4-Para obter a aprovação de outras pessoas (por exemplo, os meus superiores, os meus colegas, a minha família, os clientes...)	1	2	3	4	5	6	7
5-Porque outras pessoas me respeitarão mais (por exemplo, os meus superiores, os meus colegas, a minha família, os clientes...)	1	2	3	4	5	6	7
6-Para evitar ser criticado por outras pessoas (por exemplo, os meus superiores, os meus colegas, a minha família, os clientes...)	1	2	3	4	5	6	7
7-Porque somente se me esforçar o suficiente no meu trabalho conseguirei recompensas financeiras (por exemplo, do meu empregador, dos meus superiores hierárquicos...)	1	2	3	4	5	6	7
8-Porque somente se me esforçar o suficiente no meu trabalho me poderão oferecer mais estabilidade no trabalho (por exemplo, o meu empregador, os meus superiores hierárquicos...)	1	2	3	4	5	6	7

9- Porque me arrisco a perder o meu trabalho se não me esforçar o suficiente	1	2	3	4	5	6	7
10- Porque preciso de provar a mim mesmo(a) que consigo	1	2	3	4	5	6	7
11- Porque me faz sentir orgulho de mim mesmo(a)	1	2	3	4	5	6	7
12- Porque senão eu vou sentir vergonha de mim mesmo(a)	1	2	3	4	5	6	7
13- Porque senão me sinto mal comigo mesmo(a)	1	2	3	4	5	6	7
14- Porque pessoalmente considero importante esforçar-me neste trabalho	1	2	3	4	5	6	7
15- Porque esforçar-me neste trabalho está alinhado com os meus valores pessoais	1	2	3	4	5	6	7
16- Porque esforçar-me neste trabalho tem um significado pessoal para mim	1	2	3	4	5	6	7
17- Porque fazer o meu trabalho me diverte	1	2	3	4	5	6	7
18- Porque o que faço no meu trabalho é estimulante	1	2	3	4	5	6	7
19- Porque o trabalho que faço é interessante	1	2	3	4	5	6	7

ELQ (Arnold, Arad, Rhoades, & Drasgow, 2000) – Instruções

As questões que se seguem referem-se ao seu superior hierárquico (chefe, coordenador, supervisor, conforme a designação mais utilizada na empresa ou organização onde trabalha). Por favor dê-nos a sua visão sobre o modo como ele/ela exerce a sua função. Considere o(a) seu(sua) superior hierárquico(a) aquele(a) com quem lida diretamente e que mais determina o seu trabalho. A expressão “grupo de trabalho” significa a unidade orgânica onde se enquadra o seu trabalho como equipa, secção, departamento, ou outra designação e a pessoa que considera nas suas respostas deve ser aquele que dirige ou coordena diretamente essa unidade orgânica. Considere que não há respostas certas ou erradas. Interessa que responda com que frequência o comportamento do(a) seu superior(a) hierárquico(a) ao exercer a sua função corresponde à afirmação feita. Utilize a seguinte escala de respostas:

- 1= Nunca (nunca se comporta assim)
- 2= Raramente
- 3= Algumas vezes
- 4= Muitas vezes
- 5= Sempre (sempre se comporta assim)

Coloque uma cruz (X) sobre a sua opção de resposta para cada afirmação na escala de 1 a 5. Responda em todas as afirmações considerando a seguinte questão:

O/A meu/minha superior(a) hierárquico(a)/chefe:

Afirmações	Respostas				
	1	2	3	4	5
1. Estabelece elevados padrões de desempenho pelo seu próprio comportamento	1	2	3	4	5
2. Trabalha tanto quanto pode	1	2	3	4	5
3. Trabalha tão duro como qualquer pessoa no meu grupo de trabalho (departamento, secção)	1	2	3	4	5
4. Dá um bom exemplo pela forma como ele/ela se comporta	1	2	3	4	5
5. Lidera pelo exemplo	1	2	3	4	5
6. Incentiva os membros do grupo (departamento, secção) a expressar ideias / sugestões	1	2	3	4	5
7. Escuta as ideias e sugestões do meu grupo de trabalho (departamento, secção)	1	2	3	4	5
8. Utiliza as sugestões do meu grupo de trabalho (departamento, secção) para tomar decisões que nos afetam	1	2	3	4	5
9. Dá a todos os membros do grupo (departamento, secção) a oportunidade de expressar as suas opiniões	1	2	3	4	5
10. Tem em conta as ideias do meu grupo de trabalho (departamento, secção) quando não concorda com elas	1	2	3	4	5
11. Toma decisões que são baseadas apenas nas suas próprias ideias	1	2	3	4	5
12. Ajuda-nos a ver áreas em que precisamos de mais formação	1	2	3	4	5
13. Sugere formas de melhorar o desempenho do grupo de trabalho (departamento, secção)	1	2	3	4	5
14. Incentiva os membros do grupo de trabalho (departamento, secção) a resolver em conjunto os problemas	1	2	3	4	5
15. Incentiva os membros do grupo de trabalho (departamento, secção) a trocar informações entre si	1	2	3	4	5
16. Ajuda os membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
17. Explica aos membros do grupo de trabalho (departamento, secção) como resolver problemas por si próprios	1	2	3	4	5
18. Presta atenção aos esforços do meu grupo de trabalho (departamento, secção)	1	2	3	4	5
19. Informa o meu grupo de trabalho (departamento, secção) quando fazemos algo bem feito	1	2	3	4	5
20. Apoia os esforços do meu grupo de trabalho (departamento, secção)	1	2	3	4	5
21. Ajuda o meu grupo e trabalho (departamento, secção) a focar-se nos nossos objetivos	1	2	3	4	5
22. Ajuda a desenvolver boas relações entre os membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
23. Explica as decisões da organização	1	2	3	4	5
24. Explica os objetivos da organização	1	2	3	4	5
25. Explica como o meu grupo de trabalho (departamento, secção) se encaixa na organização	1	2	3	4	5
26. Explica ao meu grupo de trabalho (departamento, secção) o propósito das políticas da organização	1	2	3	4	5

27. Explica ao meu grupo de trabalho (departamento, secção) as regras e as expectativas	1	2	3	4	5
28. Explica as suas decisões e ações ao meu grupo de trabalho (departamento, secção)	1	2	3	4	5
29. Preocupa-se com os problemas pessoais dos membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
30. Mostra preocupação pelo bem-estar dos membros do grupo (departamento, secção)	1	2	3	4	5
31. Trata como iguais os membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
32. Toma o tempo necessário a discutir as preocupações dos membros do grupo de trabalho (departamento, secção) com paciência	1	2	3	4	5
33. Demonstra preocupação pelo sucesso dos membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
34. Mantém o contacto com o meu grupo de trabalho (departamento, secção)	1	2	3	4	5
35. Entende-se bem com os membros do meu grupo de trabalho (departamento, secção)	1	2	3	4	5
36. Dá respostas honestas e justas aos membros do grupo de trabalho (departamento, secção)	1	2	3	4	5
37. Sabe que trabalho está a ser feito no meu grupo de trabalho (departamento, secção)	1	2	3	4	5
38. Encontra tempo para conversar com os membros do grupo de trabalho (departamento, secção)	1	2	3	4	5

TLS (Schmidt, 2008) - Instruções

As questões que se seguem referem-se ao seu superior hierárquico (chefe, coordenador, supervisor, conforme a designação mais utilizada na empresa ou organização onde trabalha). Por favor dê-nos a sua visão sobre o modo como ele/ela exerce a sua função. Considere o(a) seu(sua) superior hierárquico(a) aquele(a) com quem lida diretamente e que mais determina o seu trabalho. Considere que não há respostas certas ou erradas. Interessa que responda em que medida concorda que o comportamento do(a) seu superior(a) hierárquico(a) corresponde à afirmação feita. Utilize a seguinte escala de respostas:

- 1= Discordo totalmente (ele/ela não é nada assim)
- 2= Discordo
- 3= Discordo ligeiramente
- 4= Concordo ligeiramente
- 5= Concordo
- 6= Concordo totalmente (ele/ela é mesmo assim)

Coloque uma cruz (X) sobre a sua opção de resposta para cada afirmação na escala de 1 a 6. Responda em todas as afirmações considerando a seguinte questão:

O/A meu/minha superior(a) hierárquico(a)/chefe:

Afirmações	Respostas					
1.Ridiculariza os subordinados	1	2	3	4	5	6
2.Atribui responsabilidade aos subordinados por coisas que não fazem parte das suas funções	1	2	3	4	5	6
3.Não tem consideração pelos compromissos dos subordinados fora do trabalho	1	2	3	4	5	6
4.Fala com desconsideração sobre os seus subordinados a outras pessoas no local de trabalho	1	2	3	4	5	6
5.Rebaixa publicamente os subordinados	1	2	3	4	5	6
6. Lembra os subordinados das suas falhas e erros do passado	1	2	3	4	5	6
7.Diz aos subordinados que eles são incompetentes	1	2	3	4	5	6
8. Controla o modo como os subordinados realizam as suas tarefas	1	2	3	4	5	6
9. Invade a privacidade dos subordinados	1	2	3	4	5	6
10. Não permite que os subordinados prossigam os objetivos através de novas formas de trabalho	1	2	3	4	5	6
11. Ignora ideias que sejam contrárias às suas	1	2	3	4	5	6
12. É inflexível quanto às políticas da empresa/organização mesmo em circunstâncias especiais	1	2	3	4	5	6
13. Toma todas as decisões do departamento/secção/unidade orgânica que dirige, sejam ou não importantes	1	2	3	4	5	6
14. Sente-se com direitos especiais	1	2	3	4	5	6
15. Acha que está destinado(a) a chegar às posições mais elevadas da empresa/organização	1	2	3	4	5	6
16. Pensa que é mais capaz do que os(as) outros(as)	1	2	3	4	5	6
17. Considera que é uma pessoa extraordinária	1	2	3	4	5	6
18. Sente-se a engrandecer com elogios e homenagens pessoais	1	2	3	4	5	6
19. Muda drasticamente o seu comportamento quando o(a) seu(sua) superior(a) hierárquico(a) está presente	1	2	3	4	5	6
20. Nega responsabilidade por erros cometidos no departamento/secção/unidade orgânica que dirige	1	2	3	4	5	6
21. Só oferece ajuda às pessoas que lhe possam trazer vantagens	1	2	3	4	5	6
22. Aceita créditos por sucessos que não lhe pertencem	1	2	3	4	5	6
23. Atua a pensar na sua próxima promoção	1	2	3	4	5	6
24. Tem grandes explosões de humor	1	2	3	4	5	6
25. Permite que a sua disposição de momento determine o clima no local de trabalho	1	2	3	4	5	6
26. Expressa raiva aos subordinados sem razão aparente	1	2	3	4	5	6
27. Permite que a sua disposição afete o tom e o volume da sua voz	1	2	3	4	5	6
28. Varia no quanto é acessível	1	2	3	4	5	6
29. Os seus subordinados são obrigados a tentar descobrir o seu estado de espírito	1	2	3	4	5	6

30. Afeta as emoções dos subordinados quando está exaltado	1	2	3	4	5	6
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Questionário sociodemográfico

Por último, pedimos-lhe que complete, por favor, respondendo às seguintes questões - assinale um X na opção(ões) correta(s) [dados para fins exclusivamente estatísticos]

1 Sexo <input type="checkbox"/> Masculino <input type="checkbox"/> Feminino	2 Idade: _____ anos	3 Há quantos anos trabalha na empresa/organização? _____ anos
4 Situação(ões) profissional(ais) (pode assinalar mais do que 1 situação) <input type="checkbox"/> Trabalhador do Estado <input type="checkbox"/> Trabalhador no setor privado	5 Qual o vínculo que mantém com a organização? <input type="checkbox"/> Prestador de serviços (recibos verdes) <input type="checkbox"/> Contrato a termo (certo ou incerto) <input type="checkbox"/> Contrato sem termo /efetivo(a)	6 No seu local de trabalho desempenha alguma função de chefia? <input type="checkbox"/> Sim <input type="checkbox"/> Não
7 Grau de Escolaridade <input type="checkbox"/> Sabe ler e escrever sem possuir a 4ª classe <input type="checkbox"/> 1º ciclo do ensino básico (ensino primário) <input type="checkbox"/> 2º ciclo do ensino básico (6º ano) <input type="checkbox"/> 3º ciclo do ensino básico (9º ano) <input type="checkbox"/> Ensino Secundário (12º ano) <input type="checkbox"/> Bacharelato <input type="checkbox"/> Licenciatura em curso <input type="checkbox"/> Pós-Graduação/Mestrado (pós Bolonha)/ Licenciatura Pré Bolonha <input type="checkbox"/> Licenciatura concluída (pós-Bolonha) <input type="checkbox"/> Mestrado Pré-Bolonha <input type="checkbox"/> Doutoramento	8 Setor de atividade da organização onde trabalha <input type="checkbox"/> Indústria Transformadora <input type="checkbox"/> Indústria Extrativa <input type="checkbox"/> Comércio por grosso e a retalho <input type="checkbox"/> Alojamento e restauração <input type="checkbox"/> Agricultura, pecuária, pescas <input type="checkbox"/> Construção <input type="checkbox"/> Produção e distribuição de eletricidade, gás e água <input type="checkbox"/> Transportes e armazenagem <input type="checkbox"/> Educação e ciência <input type="checkbox"/> Saúde humana e apoio social <input type="checkbox"/> Atividades imobiliárias, alugueres e serviços prestados às empresas <input type="checkbox"/> Artes e indústrias criativas <input type="checkbox"/> Tecnologia de informação e comunicações <input type="checkbox"/> Outra. Qual? _____	9 Dimensão da organização onde trabalha <input type="checkbox"/> Tem até 9 colaboradores <input type="checkbox"/> Tem entre 10 e 50 colaboradores <input type="checkbox"/> Tem entre 51 e 250 colaboradores <input type="checkbox"/> Tem entre 251 e 500 colaboradores <input type="checkbox"/> Tem entre 501 e 1000 colaboradores <input type="checkbox"/> Tem mais de 1001colaboradores 10 Tempo de trabalho na função atual <input type="checkbox"/> 3 meses <input type="checkbox"/> Mais de 3 e até 6 meses <input type="checkbox"/> Mais de 6 meses e até 1 ano <input type="checkbox"/> Mais de um ano

11 Indique, por favor, o seu vencimento líquido mensal (aquilo que recebe em média por mês)

- | | |
|--|--|
| <input type="checkbox"/> Até 500 € | <input type="checkbox"/> Entre 2001 e 2500 € |
| <input type="checkbox"/> Entre 501 e 1000 € | <input type="checkbox"/> Entre 2501 e 3000 € |
| <input type="checkbox"/> Entre 1001 e 1500 € | <input type="checkbox"/> Entre 3001 e 3500 € |
| <input type="checkbox"/> Entre 1501 e 2000 € | <input type="checkbox"/> Entre 3501 e 4000 € |
| | <input type="checkbox"/> Mais de 4000 € |

12 Há quanto tempo trabalha com o superior hierárquico a quem se referiu nos questionários?

- 3 meses
- Mais de 3 e até 6 meses
- Mais de 6 meses e até 1 ano
- Mais de um ano

Muito obrigado(a) pela sua colaboração