

## The Relationship between Chemical of Happiness, Chemical of Stress, Leadership, Motivation and Organizational Trust: a Case Study on Brazilian Workers

Fábio da Silva Ferreira<sup>1</sup>, Renato Lopes da Costa<sup>2</sup>, Leandro Pereira<sup>3</sup>, Carlos Jerónimo<sup>4</sup> & Álvaro Dias<sup>5</sup>

### Summary

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This article discusses what happens in our body and the response in the organizational environment addressing the chemical of stress and the chemical of happiness from dopamine (motivation hormone); serotonin (lead hormone); and oxytocin (trust hormone), correlating these chemicals to measure the level of trust that Brazilian workers have in their leaderships. The seriousness of the study of the chemical of happiness in the organizational environment is largely due to the understanding that they perform several important functions, especially decision making, which favors the execution of tasks. Within this context, especially with regard to decision making, the study of the love hormone, triggered by positive emotions through the chemical of happiness, or contrary, through the release of high doses of cortisol, has been shown to be necessary in the factor of prevention of negative consequences that reflects on mental health, culture and organizational climate, causing conflicts among employees, impairing cognitive potential, creativity and problem solving, making employees work unmotivated, causing, for the most part, or turnover. In order to discuss this subject, the methodology used was the qualitative research of an exploratory nature and literature review that, together with the data collection, sought to address the objectives of this article.

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**Keywords:** Stress, Trust, Motivation, Leadership, Endorphin, Dopamine, Serotonin, Oxytocin and Cortisol

### 1. Context of Research

This article presents what happens in our body and the response in the organizational environment, addressing five hormones responsible for our sensations and emotions, in which three denominated as the happiness chemical, and one as the stress chemical, correlating these to measure the level trust that Brazilian workers have in their leadership. For Sinek (2016, 2013 and 2012), Breuning (2012) and Martins (2015) these chemicals are responsible, as already mentioned, for the creation of sensations and emotions, being: endorphins, dopamine, serotonin, oxytocin, or oxytocin, leading people to a positive state of mind, which is essential for a healthy life, with significant and beneficial impact on self-trust and on the other, providing motivation, productivity and well-being.

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<sup>1</sup> Department of Business Management, ISCTE-IUL - University Institute of Lisbon, ISCTE Business School, 1649-026 Lisbon, Portugal, Email: [fabiosferreira@hotmail.com](mailto:fabiosferreira@hotmail.com)

<sup>2</sup> Department of Business Management, ISCTE-IUL - University Institute of Lisbon, ISCTE Business School, 1649-026 Lisbon, Portugal, Email: [renato\\_jorge\\_costa@iscte-iul.pt](mailto:renato_jorge_costa@iscte-iul.pt)

<sup>3</sup> Department of Business Management, ISCTE-IUL - University Institute of Lisbon, ISCTE Business School, 1649-026 Lisbon, Portugal, Email: [Leandro.Pereira@iscte-iul.pt](mailto:Leandro.Pereira@iscte-iul.pt)

<sup>4</sup> Department of Business Management, ISCTE-IUL - University Institute of Lisbon, ISCTE Business School, 1649-026 Lisbon, Portugal, Email: [Carlos.Miguel.Jeronimo@iscte-iul.pt](mailto:Carlos.Miguel.Jeronimo@iscte-iul.pt)

<sup>5</sup> Department of Business Management, ISG – Superior Instituto of Management, Lisbon, Portugal, Email: [alvaro.dias1@gmail.com](mailto:alvaro.dias1@gmail.com)

The fifth item that is cited here by Sinek (2016) and Martins (2015) is cortisol, presented in this approach as a dysfunctional chemical, which drives negative mood, causing several bad sensations among them stress, for this reason such a hormone is also named as the stress chemical. The chemical of happiness in the organizational environment plays a number of important roles (Damasio, 1994, Sinek 2016), especially decision making, which favors the execution of tasks (Zak, 2005, 2013). In this context, mainly in relation to decision making, the study of such chemical, triggered by positive or negative emotions, through the release of high doses of cortisol, has been shown to be necessary in the negative consequences prevention factor that reflects in the mental health, culture and organizational climate, causing conflicts among employees, impairing cognitive potential, creativity and problem solving, making employees work unmotivated, causing, in the great majority, turnover. Many authors see that the organizational conflicts caused by increased stress chemical, cortisol, are generated by a lack of trust, because at present many organizational climates frustrate our natural inclinations to trust and cooperate, elements that guarantee long-term human survival (Zak, 2018 and Zak, et al., 2005), promoting employee illness, absenteeism, impairing performance at work, with negative consequences attitude, relationship at work and team behavior; low motivation and commitment; labor turnover, as well as financial losses (Michie, 2012; Harnois and Gabriel, 2000).

The main objective of this research is to present the relationship between happiness chemical, stress chemical, leadership, motivation and organizational trust. To achieve this, the research will be conducted through questions presented in Table 1, below.

Research questions	Research objectives
<ol style="list-style-type: none"> <li>1. What is the level of trust in your direct leader?</li> <li>2. If you went to war and your leader was the commander of the troop, what would be the level of trust in coming back alive to the house?</li> <li>3. If your child needs care, what level of trust will you leave in the care of your direct leader?</li> <li>4. Would you change your boss if you had the opportunity?</li> <li>5. Do you find the benefits of your leader consistent with how he leads?</li> </ol>	<ol style="list-style-type: none"> <li>1. Measure the level of trust in direct leadership and verify, through research questions having as a fulcrum the literature review, the level of stress chemical and the chemical of happiness.</li> </ol>
<ol style="list-style-type: none"> <li>1. Would you buy shares of your company?</li> <li>2. Would you indicate a child to work in the company?</li> <li>3. If you were financially independent, would you still work on it?</li> <li>4. Do you consider your work very important for creating a better world?</li> <li>5. You have full knowledge of your organization's goals and objectives for the next 5 years.</li> </ol>	<ol style="list-style-type: none"> <li>2. To measure the level of trust in the organization, and to verify, through the research questions, the fulcrum of literature review, the level of stress chemical and the chemical of happiness.</li> </ol>
<ol style="list-style-type: none"> <li>1. Do you imagine yourself acting until you retire to some company you worked for?</li> <li>2. Have you noticed any difference in your body weight since you started working at the company where you work today?</li> <li>3. From the story of Little Red Riding Hood, who do you see in the corporate environment A Little Hat, the bad wolf, the hunter, and the grandmother, replaced by you, your leader and customers?</li> </ol>	<ol style="list-style-type: none"> <li>3. To present the impact of motivation and demotivation in the organization, and to verify, through the research questions having as a fulcrum the literature review, the level of stress chemical and the chemical of happiness.</li> </ol>

The work is structured as follows: theoretical approach discussing how emotions, feelings and chemical hormones are formed; the chemical of stress and happiness and their relationships with the organizational environment, and finally, presents the results of the field research as well as the discussion pertinent to these subjects.

## 2. Theoretical Approach

About 170,000 years ago, there was a genetic mutation, giving man the gift of language (Vaillant, 2011), a unique behavioral innovation in humans and, therefore, the capacity for cultural evolution, presenting a hypothesis of the biological basis of culture (Sherwood, et al., 2008), creating positive emotions (Vaillant, 2011), presupposing a biological basis for affection, in which this "has relation to the meaning that emotion puts 'in me'. The affection is an organic, psychic, cultural reality, but expressed through semiosis "(Oliveira, 2015: 384), which Correia (2001) conceptualizes as the process of signification, the production of meanings in the formation of possible meanings. Affections are the subjectively experienced aspects of emotions, commonly called feelings, caused by chemicals produced by neurons (Panksepp, 2010). These have the ability to control pain and pleasure, our movement, stimuli, and our emotional response (Volkow, 2018). Emotions provide the motivational institution for goal-focused behavior and are overly intertwined in our cognitive and perceptual processes (Zak, 2018). The following item analyzes the role of these chemical messengers and their performance in forming emotions.

### 2.2 How emotions, feelings and hormonal chemical are formed

All that we think and feel, all the love, hate, greed, affection, worry, happiness, sorrow that exists in the world; our identity and our memories; all culture, history, technology, all of this is produced thanks to the functioning of the human brain, and the main unit of its functioning is a cell called a neuron (Calabrez, 2016). The University of Queensland (s.d.) conceptualizes the neurons as cells that make up the brain, being the nervous system. They are the fundamental units that send and receive signals that allow us to move our muscles, feel the external world, think, form memories and more. Breuning (2015) and Sinek (2016 and 2013), observe that, as Calabrez (2016) cites, all this neural movement, these chemical reactions are also responsible for the production of feelings and emotions.

Emotions are defined by Damasio (2014: 430), "a collection of chemical and neural responses that form a distinct pattern." For the author, they are patterns of chemical and neural responses, whose function is the preservation of life, survival; activating a set of brain structures, the great part being responsible for the monitoring and regulation of the body states around physiological values. Calabrez (2016b) and Volkow (2018) report that emotions are coordinated programs of action by the brain that manage changes throughout the body. Calabrez (2016b) says that emotion is automatic, we have no control over them, we can not control it, it guarantees our survival, and its effectiveness derives precisely from the fact that it is automatic, from being out of our control.

Calabrez (2016b) explains that emotion is often unconscious, but when we become aware that we are excited, we go through another process in our brain called feeling. Feeling is the conscious awareness of an emotional program. Damásio (1994), informs that emotions generate behaviors. Broadening this understanding, Breuning (2015) reports that emotions have three different, closely related levels: the mental or psychological level, the physiological level, and the behavioral level. These three complementary aspects are present even in the most basic emotions, such as fear. Engelman (2015) distinguished two other types of physiological components as an emotional response: autonomic (autonomic) and hormonal.

The term hormone is derived from the Greek *hormaein*, which means "to put into motion". Alluding to a chemical that implicates in the regulatory act on a particular organ or organs This is organic content secreted by plants and animals that acts in the adjustment of physiological activities and homeostasis maintenance. Hormones affect the brain in a number of ways. Some of the forms involve physiological regulatory pathways; cognitive processes such as perception, attention, learning and memory (Wirth, 2015). Sinek (2016, 2013 and 2012), Breuning (2012) and Martins (2015) present five hormones responsible for the creation of sensations and emotions: endorphins, dopamine, serotonin, oxytocin (or oxytocin) and cortisol.

## 3. Chemical of stress and happiness and its relations with the organizational environment

### 3.1 Cortisol as a stress biomarker

The chemical of stress is conceptualized by Sinek (2016 and 2013), as any environmental or physical pressure that provokes a response of the organism. In most cases, stress promotes survival because it forces the body to adapt to rapidly changing environmental conditions, and can be understood as an essential motivator for survival. Dictionary Priberam (2018), defines stress as "a set of organic and psychic disorders caused by various stimuli or

aggressive agents, such as cold, an infectious disease, an emotion, a surgical shock, very active and fast living conditions, and so on. "

The goal of cortisol is to safeguard against possible dangers by mobilizing the body's energy resources for effective work and protection in a dangerous situation by triggering protective behavior (Sinek, 2016 and 2012). In the business area, stress is influenced and influences the organizational climate, which is subject to frequent changes and can be shaped by the top management of an organization (Hamilton, et al., 2010). Climate is the state of mind of the organization (Porto and Ferreira, 2016). Within this context, selection research, coding, filtering of data on organizational stressors has confirmed that job satisfaction, quality of service, and the relationship between stressful organizational climate and diminished organizational commitment are factors that most damage the organizational environment (Green , et al., 2016).

A professional who does not find minimal circumstances of protection in the work environment will certainly get annoying as well as will not be able to perform his services with the same potential (Michie, 2012), whose consequences Harnois and Gabriel (2000) sum up in:

- ✓ Absenteeism: increased general absence due to illness, particularly short periods, absence, health problems (depression, stress, burnout), physical conditions (hypertension, heart disease, ulcers, sleep disorders rash, headache, neck and back pain, low resistance to infections).
- ✓ Performance at work: reduction of productivity and production; increased error rates; increase in the number of accidents; poor decision making; deterioration in work planning and control.
- ✓ Attitude and behavior of the team: loss of motivation and commitment; exhaustion; poor punctuality; labor turnover (particularly expensive for companies at management levels).
- ✓ Relationships at work: tension and conflicts between colleagues; bad relationships with customers; disciplinary problems.

Success in managing and preventing stress will depend on the organization's culture and should be seen as useful information to guide action, not as a weakness in individuals. A culture of openness and understanding, not guilt and criticism, is essential. Building this kind of culture requires active leadership (Michie, 2012), which creates an environment whose happiness chemical is above the chemical of stress (Sinek, 2016, 2013, 2012, Breuning, 2012 and Martins, 2015).

### **3.2. The chemical of happiness as a biological marker of well-being**

As already known, the chemical of happiness comprises four hormones: dopamine, endorphin, serotonin, and oxytocin (Sinek, 2016). In an environment in which these chemicals are not released, there is less trust, lack of team spirit, stress increases, we work alone and leadership falters. In such an environment, there is less willingness to help colleagues (Breuning, 2012; Sinek, 2016). In this environment, trust and leadership are required. Endorphin does not correspond to the subject and objectives connected to the present study, therefore, this item will be presented succinctly.

#### **3.2.1. Endorphin - the hormone of the pain response**

Endorphins are commonly produced in neurons in response to pain and stress, helping to alleviate anxiety and depression. Like morphine, they act as an analgesic and soothing agent, reducing the perception of pain (Sinek, 2016, 2013 and 2012).

#### **3.2.2. Dopamine - Motivation Hormone**

Dopamine is the chemical responsible for motivation (Breuning, 2012, 2015, Sinek, 2016, 2013, 2012), is a neurotransmitter that motivates us to achieve our goals (Rogers, 2011). This chemical develops in the brain causing a sense of satisfaction (or pleasure) as a sign of encouragement to perform certain tasks (Breuning 2017), being activated when goals are set and we reach them, making us feel very good when we finish a task or we reached a goal (Sinek 2016; Breuning, 2012 and 2015). Cofer and Petri (s.d.), conceptualize motivation as being forces acting on or within a person to initiate a particular behavior.

Motivation can be the main force that can be applied to the employee so that he can act voluntarily in order to achieve a goal. Motivated people love to work and are more productive and creative. They go home happier and have happier families. They treat their colleagues and customers better. Motivated employees help create stronger businesses and economies (Sinek, 2012).

### 3.2.3. Serotonin - Leadership Hormone

Serotonin is a chemical neurotransmitter of impulses between the nerve cells of the human brain. Susceptible neurons are located in almost the entire brain. The synthesis of serotonin occurs in the brainstem (Sinek, 2016, 2012), being responsible, among others, for self-control or emotional stability. It is the chemical we experience when we are respected, appreciated, and given preferential treatment. This adds to our trust and makes us feel incredible. It is the chemical responsible for leadership (Breuning, 2012, 2015, Sinek, 2016, 2013, 2012).

Sinek (2016, 2013, 2012) proposes a concept of leadership that has little to do with authority, administrative acumen or even to take command. For the author, true leadership empowers others to accomplish things they did not find possible, and continues to report that leadership is not the same as being the leader. Being a leader means that the person has the highest rank. Driving, however, means that others follow it willingly - not because they need it, not because they are paid for, but because they want and trust. The ability to generate and maintain trust are the central ingredient of leadership. Trust is not simply a matter of shared opinions. For (Sinek, 2012), trust is a biological reaction to the belief that one has our well-being at heart, as shown below.

### 3.2.4. Oxytocin - trust hormone

This neurotransmitter helps you relax and stop feeling anxious in social interactions promoting the synthesis of endorphins and the appearance of happiness. Oxytocin is produced in both the brain and blood (Zak, 2015 and 2018). Among some classifications, oxytocin is considered by a large number of scholars as the chemical of trust, because this feeling causes the brain to release oxytocin. Lack of trust is lack of oxytocin, and the opposite is also true (Zak, 2018, 2017, Zak et al., 2005).

Companies that have a culture of high trust are more productive, have more positive energy in the work environment, have a high degree of cooperation among employees, and a lower turnover of employees, than companies with a low degree of trust (Zak, 2018). This hormone should be considered a fundamental factor in the management of the organizational environment because it is a mechanism through which social actors reduce the internal complexity of their interaction system by believing in the credibility of a person or a system. It is also believed that it is born of the sharing of values and enables people to work together, which can generate more knowledge and innovation (Andrade, Fischer and Stefano, 2015, Sinek, 2016, 2012). It substantially increases an organization's performance, employee involvement, retention, and well-being, impacting on economic performance (Zak, 2018).

Sinek (2016, 2012), reports that when leaders are generous, trustworthy and kind, it infects others to become generous as well. In this beneficial and reliable organizational climate has high levels of oxytocin, people feel valued and motivated. Those who truly lead are able to create followers of people who act not because they are paid, but because they are inspired and motivated, and also because they want to, it has to do with emotional contagion (Sinek, 2012). For Lau and Liden (2008), research on emotional contagion proposes that positive feelings have the power to spread between two parties or within teams. The authors cite the equilibrium theory to describe that if a leader trusts two employees, they in turn trust each other, so that the balance is preserved, and that the leaders' trust tends to spread as far as which adds to the reliability perceptions of trusted employees. Several authors, among them Lipman, (2013), Mayer et al. (1995); Covey (2002); Impelman (2017); Zak (2018); Bersin, et al. (2017) report that trust measurement is not a precise science and there are no numerical scales that help to calculate the level of this feeling. The same authors report that, in order to measure the level of trust between people, it is due to:

- ✓ Observe the feeling of empathy among employees - the greater the empathy, the greater the level of trust;
- ✓ Noticing how enthusiastic the person is to perform a certain task the leader offers - the greater the enthusiasm, the greater the level of trust;
- ✓ Know the degree of risk that the employee is willing to assume - the higher the risk, the greater the trust.

### 3. Methodology

Methodology is an instrumental concern. It deals with ways of doing science. Take care of the procedures, the tools, the paths. The purpose of science is to deal with theoretical and practical reality. To reach this end, several paths are put forward. This treats the methodology (Demo, 1995).

For the study of human behavior two types of methods are used by the social sciences: the qualitative and the quantitative. As the article seeks to respond to human behavior and feelings in the face of certain events, in this research the qualitative method was used, since, according to Suassuna (2008), qualitative research is characterized by its objectives, which relate to the understanding of some aspect of the social life, and their methods (in general) generate words, rather than numbers, as data for analysis. Also a part of this research was a review of literature through bibliographic analysis, which together with the data collection sought to present the objectives described in Table 1. Regarding its nature, according to what was observed by Sampieri et al. (2010), it is an exploratory, practical research, driven by the need of knowledge to apply results, with the aim of obtaining competitive advantages.

In order to arrive at the proposed objectives, structured questionnaires were used through Survey type, personalized and elaborated by me in Google forms, that is, an online questionnaire, becoming available on such platform and sent to WhatsApp, Facebook Messenger and Email applications, and 140 valid answers were obtained. The sample characterization is as follows: 44% who answered the questionnaire are men and 56% are women, between the ages of 30 and 70 years.

The questionnaire was elaborated with closed questions and included the Likert format (with: 1: total mistrust and 5, I totally trust; 1 totally misaligned and 5, totally aligned; 1, has no importance and 5, very important; no knowledge and 5, I have total knowledge), dichotomous response (yes, no); and multiple choice (gender, age, existence of children, time that is inserted in the labor market, more time in which one remained in an organization, time in which works in the current company, position in the organization, and choice, through the Little Red Riding Hood, what kind of character the interviewee had in mind for him, for the immediate leader and for the company's clients, choosing between Bad Wolf, Little Red Riding Hood, Grandma and Hunter). We then obtained valuable answers to understand and respond to what the article proposes.

## 4. Research and Discussion Results

### 4.1 Measuring the level of trust in direct leadership

Regarding trust, direct leadership shows that only 15% of people rely entirely on direct leadership, and 16% are totally suspicious. It was also observed that the higher the level of trust in the boss, the greater the number of respondents who imagine going to work in the organization in which they work today. It was also verified that the female gender presented a larger population than the masculine one when the trust level is very low and male gender presented a larger population when the level of trust in the leadership is high.

As for the direct leader being the commander who will bring the troop safely, it was observed that only 14% of people fully trust that they would return home safely. In this issue there was an increase in mistrust that rose from 16% to 21%, which can be considered as an indication that the higher the risk the lower the level of trust in direct leadership. In both cases a positive reference of low oxytocin, related to the hormone of the trust, is noticed. In leaving the child with direct leadership, 28% would not trust at all, while 16% would totally trust. Here the difference between the extremes is very significant, showing that people would not feel comfortable with this situation, indicating low oxytocin. In the option to change heads, 55% said yes, they would change and 45% would not. The consistency was also verified where 100% of the respondents who have a very low level of trust in their leadership would change the same if they had the opportunity. When the level of trust in leadership is high 95.2% (almost 100%) would not change boss. The 55% percentage indicates that most are unhappy with the lead, showing low dopamine, serotonin and oxytocin.

Even though there was little difference, what predominated was cortisol. As for compensation being aligned with leadership roles, only 14,% reported believing that it was aligned with performance. Note the demotivation, ie according to the literature review, there is a relationship with low dopamine and oxytocin. It is understood in front of these results that the trust that the employees have in the leadership is low, as well as the motivation, damaging the climate and organizational culture, in which, as reported, the lack of trust, has as answer the collaborators in taking high risks in favor of the company. Confident employee is directly related to the motivation to fulfill a task.

In this sense the research elaborated by Green, et al. (2016) corroborate in which the stressful organizational climate, points out the negative aspect and is related to the organizational commitment. Their research has resulted in people being more adaptable having higher levels of organizational commitment when organizational stress is low but less compromised when organizational stress is high. Some authors note that trust in leadership is one of the most important factors influencing workplaces. The most powerful tool that determines a leader's success is their ability to be trusted. It is the instrument that inspires and motivates people to believe and follow someone, to promise their loyalty and trust (Krznic, 2015; Covey, 2003).

Trust can develop when people feel secure in being accepted. Acceptance leads to trust because it increases the chances that people will be unconcerned believing that their behavior will have positive consequences for them (Andrade, Fischer and Stefano, 2015). Relying on someone means that the leader allows himself to take risks in what he shares with those he led (Zak, 2018 and Zak, et al., 2005). Trust depends on the knowledge that comes from information and experience. We trust someone because the information we get about him allows us to have definite perspectives on his behavior. This type of trust is strategic: if A relies on B, B will rely on A as reported by Lau and Liden (2008), trust through emotional contagion and this may provide mutually beneficial arrangements for cooperation.

#### **4.2 Measuring the level of trust in the organization**

In relation to investing in the company - buying quotas, 51% reported that they would not invest while 48% said they trusted to invest their reserves in the company where they work. Here we observe that in the investment question, there is a balance between the respondents, that is, oxytocin and cortisol are well present in this relationship. In the indication of the child to a position in the company, the result has a small change in which 57% would indicate while 43% would not indicate. It was also verified that the higher the level of trust in leadership, the greater the number of respondents that would indicate the company where it works as the first employment option for the child. In this situation, a greater number of responses were obtained, which indicates that most respondents believe that the company is a place to be considered for work, increasing, according to theoretical reference, the level of dopamine and oxytocin.

In the option to continue working in the company even though they had financial independence, 56% reported that they would only come back to organize things and give the company time to prepare for their departure. Here it is observed that there is a high level of commitment with the organizations, which could be understood as a high level of responsibility of the worker being able to be understood a high level of dopamine and oxytocin. 17% reported that they would never return.

As to the importance of their work in creating a better world, only 23% of the respondents believe it to be very important, which can be an issue to be discussed since work should be considered as important in people's lives and as well as the functions they perform demonstrating, also, low level of dopamine and oxytocin. Knowledge about the goals and objectives of the company, only 15% responded to know fully, a number considered low since the goals and targets should guide the people in which direction the company is going. Here we see a low level of dopamine.

Realizing "enterprise" as a human organization, the element of trust is an effective aspect of its operation. This absolutely affects the interdependence of its components, influencing aspects such as the working environment levels of cooperation and performance. Like organizational trust, commitment is one of the fundamental elements on which the good work of organizations is based. There is a generally accepted belief that the existence of commitment should be positive for both workers and the organization as committed employees will be more focused on achieving the company's goals, resulting in increased self-esteem and employee involvement (Mayer et al. 1995). When trust decreases, performance decreases and cost rises. The converse is equally true: when trust increases, cost falls, and performance increases (Covey, 2003). Trust is a very valuable item. It can make all the difference between an employees emotionally committed to an organization (Lipman, 2013).

#### **4.3 The impact of motivation and demotivation in the organization**

The question of working until retiring in a company that has already worked, 45% said they would not work, while 55% said yes. Here, a little more than half of the respondents showed a positive feeling about the organization,

which may mean that at some point they were motivated to stay for a long time in the company, proving that there was a higher level for dopamine than for the cortisol.

Regarding the difference in body mass since they started in the company, 82% of the respondents perceived a difference in weight, with 68% gaining weight. Here we see, guided by the literature review, that the cortisol level is greater than the happiness chemical. Finally, an analogy was made with respect to the characters in the Little Red Riding Hood story, with the corporate world instead of the tale's atmosphere, in which: Chapeuzinho has the mission to take the snack basket to Vovozinha; the Wolf has the purpose of devouring the Little Capuchin and the Grandmother. The Hunter has an obligation to defend the old lady and the girl. Leaders were considered by most respondents as the Wolf, ie the danger to be faced during the performance of their duties, totally disregarding the principle that the Leader should ensure the safety of the group, in this case should be considered as hunters. Another important negative point was the number of times the Client was considered Lobo, that is, the institution by which it should be considered as the reason for the existence of an organization was considered as a danger to it. As presented in the theoretical framework, in this case, there is a low level of serotonin, dopamine and oxytocin, which raises the level of cortisol.

In this aspect, the impact of motivation and demotivation on the work environment, the most noteworthy factor was the high percentage of people who perceived the difference in body mass after starting work at the company, in which 68% gained weight, indicating, according to the literature presented, which had a prevalence of cortisol. Research with more diverse workers has shown that increased cortisol disrupts homeostasis of eating behavior (Yau and Potenza, 2013), increasing appetite and also, in some cases, adds to overall motivation, including motivation to eat (Harvard Health Publishing), Increases the consumption of comfort foods such as fast food, snacks, calories and highly palatable foods (Sinha and Jastreboff, 2013), which acts as a form of self-medication to dispel unwanted suffering (Yau and Potenza, 2013). It is also associated with increased binge eating. The stressed brain expresses both a strong eating urge and an impaired ability to inhibit nutrition - together creating a potent formula for obesity (Sinha and Jastreboff, 2013).

In the analogy with the characters of the Little Red Riding Hood story, the mastery of cortisol was also noticed, and this hormone, in high doses, according to theoretical reference, only harms the environment as a whole. High cortisol contributes to alcohol abuse and consumption (Sinha and Jastreboff, 2013), relapse of alcoholics (Bressert, 2016), obesity (Van der Valk, et al., 2018), insomnia (Harvard Health Publishing, 2018), factors that may contribute to the increased risk of obesity and metabolic diseases, including abdominal obesity, insulin resistance, hypertension, atherosclerosis, which may predispose individuals to cardiovascular disease and type II diabetes (Yau and Potenza, 2013).

Cortisol is the biomarker of stress, which causes depression both are regarded as a mental disorder, being among the leading causes of lost workdays in the world. Mild cases result in a loss of four days of work per year and the serious cases of about 200 work days per year (Felício, 2017). Bach (2017) reported that more than 300 million people worldwide suffer from depression, which is the main cause of incapacity for work. According to the United Nations (UN, 2018) more than 260 million people live with anxiety disorders, costing \$ 1 trillion to the global economy each year in lost productivity, with common mental disorders affecting 30% of employed and will be the main cause of disability by 2020. In addition, they are the third cause of social security benefits in Brazil. In Brazil, Social Security, which registered in 2016 the removal of 75,300 workers due to depressive conditions, with the right to receive sickness benefits, which represents 37.8% of all medical licenses due to mental disorders and behavioral in the same year. In 2016, there were more than 199 thousand cases of people who were absent from public and private companies because they suffered from these diseases. This number surpasses the total recorded in 2015, which was 170,800 cases of leave (Guimarães, 2018).

Castilho (2017), reports that in Brazil, between 2012 and 2016, the cost of work accidents, among them the psychological illness associated with the organizational environment, has already cost more than R \$ 1 billion a year Social Security, and that, according to Prates (2017), these types of disorders are the fastest growing in Brazil. In order to eliminate these factors, it is necessary to create a profitable professional atmosphere, in which each one performs and works productively, and this is transversally cataloged to the way the organization works the motivation of the teams (Sinek, 2016, 2012; al., 2015, Zak, 2018)

According to Oliveira (2001), in order to construct a climate of trust, motivation and cooperation satisfactorily, there is a need for transparency between leaders and the whole team. All need to have qualities of communicating and discussing issues related to the expansion of the company. In this way, employees are confident that their assessments are measured and their professional needs are consented to. Ways like this change self-trust, an agreement of the importance of each professional in the methodologies of the organization and the addition of the industry. Another aspect that cooperates expressively for employee motivation is the actual expectation of professional development. When the person feels that he can produce broader steps in his career, he is hardly accommodated. A career plan disrupts accommodation by proving to employees that there are still things to be pursued. Therefore, the professional qualification focused on leadership will always help pointing out the best profitability, achieving results that are higher than expected.

## 5. Final considerations

Available literature has shown that trusted leaders are organizational change agents essential to the motivation of their leaders, so new dimensions to effectively manage the shortcomings are continually explored to help an organization overcome these difficulties. Leadership is the choice to serve others with or without any formal classification. There are people with authority who are not leaders and there are people on the bottom rungs of an organization who are certainly leaders. It is okay for leaders to appreciate all the advantages bestowed on them, they must be willing to give up those advantages when needed. Leaders are those prepared to look at everyone around them and they are often willing to sacrifice their own comfort for the comfort of the team (Sinek, 2014).

As shown, it is not possible to measure employees' trust in numbers, it cannot be quantified this feeling; however, it is possible to measure through three situations: the observation of the feeling of empathy among employees - the greater the empathy, the higher the level of trust; note how much the person is excited to perform a certain task that the leader offers - the greater the enthusiasm, the greater the level of trust; and know the degree of risk that the employee is willing to take - the greater the risk, the greater the trust.

Through the case study, according to the answers of the questionnaire, it was possible to perceive that the levels of trust of the Brazilian workers have in their direct leaders, are low. They have shown that there is little empathy between the leaders and the leaders, as well as the low enthusiasm of the latter. Making it clear that they are not willing to take high risks in favor of the company, and this is a sign, as already indicated, that there is a low trust and, consequently, little motivation to carry out their activities in the companies in which they work, thus creating an environment which predominates in stress chemical, cortisol.

However, employee trust is essential to a company's success. When employees feel confident, they do their job better and remain loyal to their company for a longer time, and as explained in the theoretical framework, employee motivation is directly linked to productivity and operational success at the high level of dopamine. The motivation process requires a response to the specific needs of employees with effect on productivity, performance and satisfaction in their work. Even with the existence of a high cortisol rate resulting in low trust in leadership, there is a small rate of the chemical of happiness contributing some aspects that provide positive factors of commitment to the organization.

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