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DIFFERENCES OF EMOTIONAL
INTELLIGENCE BETWEEN MEN AND WOMEN
AND ITS IMPACT ON TEAM LEADERSHIP
AND EFFECTIVENESS

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Abstract

Title: Differences of Emotional Intelligence Between Men and Women and its Impact on Team Leadership and Effectiveness

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The objective of this study is to explore the leader's Emotional Intelligence (Goleman, 2004) influence team leadership (Morgeson et al., 2010) in order to achieve better Team Effectiveness (Kozlowski & Bell, 2003). The relationship between these three variables has not been identified in the past, which is the reason this study has been conducted. A survey has been created based on validated scales and was distributed to teams. After an extensive literature review, four hypotheses about these relationships have been created and were all supported after the statistical analysis. This study confirms the link between Emotional Intelligence, Leadership and Team Effectiveness. Our findings show that Emotional Intelligence leads to better Team Effectiveness through Leadership Support the Social Climate function. It also shows a higher level of Emotional Intelligence in Women Leaders compared to Men Leaders. Taking into consideration these results, companies should start paying more attention to Emotional Intelligence values of the candidates during the hiring and promotion processes, in order to achieve higher overall organizational success.

Key Words: *Emotional Intelligence, Team Effectiveness, Team Processes, Team Leadership, Gender*

Resumo

Título: As Diferenças na Inteligência Emocional Entre homens e Mulheres e o Seu Impacto na Liderança e Eficácia das Equipas

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O objetivo desta dissertação é o estudo da influência da Inteligência Emocional (Goleman, 2004) na função de Suporte de um líder (Morgeson et al., 2010), de forma a conseguir uma melhor Eficácia da Equipa (Kozlowski & Bell, 2003). A relação entre estas três variáveis ainda não foi identificada no passado, sendo a principal razão da condução deste estudo. Um questionário foi criado baseado em escalas validadas e foi distribuído por equipas. Depois de uma extensa revisão de literatura, foram criadas quatro hipóteses referentes a estes relacionamentos, que foram suportadas por uma análise estatística. Este estudo confirma a ligação entre Inteligência Emocional, Liderança e Eficácia de uma Equipa. As nossas conclusões mostram que a Inteligência Emocional leva a uma melhor Eficácia numa equipa, através da função de Suporte do líder da equipa. As conclusões também mostram que há um maior nível de Inteligência Emocional nas mulheres, em comparação com os homens. Considerando estes resultados, as empresas devem prestar mais atenção aos valores da Inteligência Emocional de candidatos nos processos de recrutamento e de promoção, de forma a chegar a um melhor nível de sucesso organizacional.

Key Words: *Inteligência Emocional, Eficácia de uma Equipa, Processos de uma Equipa, Liderança de uma Equipa, Género*

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Introduction

Leadership is a concept as old as the world. Leaders are what make history but not only. We can find them everywhere: in households, in governments or in companies. They are a main part of our lives and of what our society's values are based on. According to the "Great Man" theory, they are what "make" history (Carlyle, 1888). They are part of all societies and have a great influence on humans' lives. As they have such a big impact, understanding the different ways of practicing leadership from one leader to the other is crucial (Eerkens, Vaughin & Kantner, 2010).

Nowadays, leaders are key to organizational success and they have a great impact on team performance. In fact, companies have become more team oriented than ever before. It is now a common belief, based on different studies, that through the division of the organizational mission into smaller team objectives, the final companies' goals will be reached much faster with the insurance of greater organizational achievements (Salas, Sims & Burke, 2005). The concept of team management improved through time from managing tasks to leading individuals.

As teams and team leadership took such an important place in the organizational world, researchers started digging more deep into the topic, seeking to find how teams can improve in order to achieve high performances and how leaders can help them.

As teams are composed of people, and as we are social creatures, it is natural that these individuals develop personnel relationships between themselves. Humans tend to bond with each other in order to cooperate for the sake of a final achievement. This is not a new phenomenon, but dates since the beginning of humanity. It is extremely important that these relationships are well managed in the organizational context as the management of interpersonal relationships between individuals is critical toward reaching the final goal (Bass & Stodgill, 1990). Leaders with high Emotional intelligence are those who can create a viable environment through a good management of interpersonal relationships, where employees can feel comfortable sharing their ideas and where they are more willing to cooperate in order to be able to reach the highest team performance (Goleman, 2004).

Moreover, during these past decades, teams became much more diverse and the integration of minorities in teams became an important factor for team effectiveness.

The integration of women in higher management positions is a constant debate and even though governmental regulations and numerous gender equality campaigns have been put into place to encourage companies toward this movement, the percentage of women leaders across the globe is still low. In fact, according to a 2016 Forbes study, the global percentage of women in senior leadership roles account only for 24%. This survey also showed that the G7 countries only count 22% of women in senior leadership and a surprising 39% of companies with no women in senior management at all.

The purpose of this paper is to explore the link between emotional intelligence and team effectiveness and understand if there is a gender difference in its value, thus, adding another argument to the gender equality debate.

Teams and Organizations

Defining Teams and Their Context

Teamwork has become a fundamental part of organizations' daily activities. Most companies nowadays, structure their work on a team base (Morgeson, DeRue & Karam, 2010). A survey conducted in 2006 by Martin and Bal (cit in. Morgeson et al., 2010), came out with the result that "teams are central to organizational success" according to 91% of high-level managers.

But what is a team? Working teams are defined by two or more individuals working together; who aim to execute managerial relevant assignments; share a common objective; collaborate and behave as a small community; have mutually exclusive tasks; preserve bounds; and finally are working in an organizational situation that puts in place these boundaries, limits the unity and shapes their relationships with the other teams in the same organization (Kozlowski & Bell, 2003).

Teams function in a fragmented system composed of numerous levels. This system works on both bottom-up and top-down interactions between the different members of the team and other system parts (Kozlowski & Klein, 2000).

Teams perform in an environment where the organization itself is a context for the team and where teams represent a context for the individuals composing these teams (Kozlowski & Bell, 2003). The first context, the organizational one, is represented by technology, management levels, infrastructure, culture, leadership, etc. While the second context, the team, is formed by the relationships created between the team members and the degree of influence of these relationships on the individuals. This last context is not inherited from the organization but created by the team members themselves through interactions, managerial level distance, and similar intellect and knowledge. These influence the team bound, relationships and the team processes (Kollowski & Bell, 2003).

Individuals behave, and not teams. Nevertheless, they operate in a course that creates team level context. They are incorporated in teams and teams on their own are part of an organization. This creates a complex hierarchical system based on several levels and characterizes organizational structures (Kollowski & Bell, 2003).

Understanding Team Processes

Teams go through different types of processes in order to achieve their final goal. Marks, Mathieu and Zaccaro (2001) propose a typology of team processes. They divided these processes according to two main phases being: *Transition Phase* and *Action Phase*. During the *Transition Phase* the team focuses mainly on the assessment of previous action and on the outlining of the future activities that will lead to the goals. This step is fragmented into three main processes being: Mission Analysis Formulation and Planning (1), Goals Specification (2), and Strategy Formulation (3).

Mission Analysis Formulation and Planning (1), consists on interpreting the mission that the team has in order to achieve it, highlighting the main assignments and understanding and identifying the environmental conditions in order to forecast possible issues. Goals Specification (2), consists on the identification of goals and sub goals that the team has to reach in order to achieve the main mission. Finally comes the Strategy Formulation (3), which is the creation of a plan including alternative solutions to possible problems in order to accomplish the goals and the mission of the team (Marks, Mathieu & Zaccaro, 2001).

The second team phase identified is the *Action phase*. It is during this phase that the team will be working and accomplishing tasks in order to achieve the final objectives. This phase encompasses four different processes. Monitoring Progress Toward Goals (1) consists on following the tasks and improvements toward the final goals and objectives. During this process, it is as well important that the team members communicate their progress and give feedback to each other (Marks et al., 2001).

Systems Monitoring (2), aims to track and record the team's environment and available resources as they both are linked to the success of the team in reaching the mission. This process includes both the internal (resources such as equipment and personal skills) and external (taking into consideration environmental elements that may affect the progress of the team) factors. Team Monitoring and Backup Behaviour (3) is about assisting others in their tasks, giving feedbacks and coach whenever it is necessary. Coordination (4) is crucial in the team working processes, as it impossible to progress or achieve the final goal without the team members coordinating with each other (Marks et al., 2001).

Another type of processes identified by the authors are the *Interpersonal Processes*. These are fundamental processes as they occur throughout the whole team work and

should happen during both of the Transition and Action phases. They are key to team effectiveness as they manage the relationships between the team members. These processes include: Conflict Management (1), Motivation and Confidence Building (2), and Affect Management (3). It is very common during teamwork to have conflicting ideas and rivalry. These issues are very critical to the team effectiveness, particularly when it is related to the values and attitudes of the members, as it slows down the work and activities of the team members, and affect the motivation. This is why it is very important to solve these issues and handle them in the best way possible in order to keep the harmony of the team and to keep the progress (Marks et al., 2001).

There are two types of conflict management. The first, Preemptive Conflict Management, involves settling conditions in order to avoid future possible conflicts and mentor the team before any issues happen. It suggests the creation of norms for the sake of the establishment of a cooperative environment instead of a competitive one. The second, Reactive Conflict Management, is based on the search for possible solutions to emerging conflicts ((Marks et al., 2001).

Motivation and Confidence Building (2) deals with keeping a high level of motivation as well as confidence and trust in order to accomplish the mission of the team. As team members may boost each other's confidence levels through appreciating each other's work, it is often the case in group works that some team members don't show appreciation for other's work or may show that they don't think that others may have the appropriate skills to help the team achieve its final goals (Marks et al., 2001).

Finally, Affect Management (3) is about managing others' emotions (e.g. frustration, stress, happiness) and regulating them during the team work activities in order to maintain and improve team performance. It may also be in the form of team building and discussions in order to get the team closer to each other. Nevertheless, if these activities are not well done they may result in the opposite desired effect and create much bigger problems and so have a bigger negative impact on team performance than it was at the beginning (Marks et al., 2001).

Leadership Types and Differences in Styles

Leaders of the past were represented by prophets and kings who were seen and perceived as symbols of their societies. Perceiving leaders as heroes and creating myths was very important in the past in order to create better civilized societies. This was much more important in order to justify obeisance to the leader and for better acceptance of dictatorship (Bass & Stodgill, 1990).

The first studies about leadership started by studying history and civilizations and the impact that their leaders had on them and how they shaped them. Later on in the history, philosophy started taking place in the study of leadership. These studies gave birth to leadership as we know it nowadays. Moreover, military studies of leadership shaped the creation of management styles (Bass & Stodgill, 1990). Social science studies influenced as well the rise of theoretical concerns about leadership and started identifying different leadership styles. As the corporate world started to become more and more complex, more questions were raised. The studies of leadership got even more complex during the last century as minorities started to be part of the management of the companies, as long as the increase in cultural diversity in teams. As time passed by, the importance of good leadership and its impact on the employees' efficiency became obvious (Bass & Stodgill, 1990).

While studying leadership in the corporate world, scientists of the past have always focused on the leader only. Today, things have changed and the study of leadership as well. During the last decades, researchers have not only been studying leaders, but also their environment. This includes their followers and peers, their different cultures and the incorporation of gender diversity in the high end of corporate management. Leadership is not anymore about an individual but about the whole work context, their relationships with their followers and the whole tangled socio dynamic (Avolio, Walumbwa & Weber, 2009).

These relationships that leaders have with their followers are mainly based on the exercise of influence from both sides but mainly from the leader's perspective. In fact, influence is the basis on which leadership relies on. Tead (1935) described it as the influence that leaders have in order to push others to accomplish a common desirable ultimate goal (Bass & Stodgill, 1990). Correspondingly, Tannenbaum, Weschler, and Massarik (1961) explain leadership as "interpersonal influence, exercised in a situation

and directed, through the communication process, toward the attainment of a specified goal or goals” (Bass & Stogdill, 24:1990). Although people differ on the extent to which they can be influenced by the behaviour of one person, there is a mutual relationship between both parties, followers and leaders (Bass & Stogdill, 1990). Northouse (2013), describes it as a process by which an individual is able to influence a group or individual in order to achieve a common objective.

While leadership is about influencing others, it also reflects the leadership style of the leader. Two recurrent leadership styles have been identified by Bass (1997): Transformational and Transactional leadership. Regarding transactional leaders, according to Bass (1997), it is based on a punishment-reward system. If the employee behaves well, he has a promise from his leader to be rewarded with a bonus or other benefits. Most of the time, this is a very harmful system and very unlikely to be successful. Transactional leaders play a role of managers and not of leaders. Their main focus would be to follow the same rules, create a working path with specific rules that are not to be broken. This kind of leadership is described by the author as having these characteristics: “contingent rewards”, “management by exception” (active and passive), “laissez-faire”. This kind of leader bases himself on reward/punishment systems, he/she would give his employees the freedom to accomplish their tasks by themselves, take their own decisions without assistance and would try to avoid hard decisions. Nevertheless, the extent to which the threats work on the employees and followers depends on first how much the leader is able to apply these punishment threats or promise of reward as usually these go to a senior level and second is how much the employee really wants the reward or how much he/she is scared of the punishment (Bass, 1997).

Transformational leaders are those who try to captivate the interest of their followers and engender acceptance of the goals that the team have to reach. They would behave in a way that will make their employees forget about their own benefits and rather focus on the benefits of the team. The characteristics of a Transformational leader according to Bass (1997) are charisma, inspiration, intellectual stimulation and individualized consideration. This type of leader would show confidence, try to push his followers to think by themselves about possible solutions or why something didn't work and would give personalized assistance to each of them if needed. He/she has to show their employees how to be positive when encountering issues, help them develop a rational

thinking and push them to be more committed to what they are doing. Last but not least, coaching and giving full attention to every employee is necessary (Bass, 1997).

Team Leadership

Zaccaro, Rittman and Marks (2001) argue that leadership has an influence in the effectiveness of the teams and their achievements. They follow the approach of “functional leadership”, which has as key affirmation that leader’s main objective is to be able to get the work done and fulfil any task that is not appropriately taken care of, for the sake of the team’s needs (Zaccaro, Rittman & Marks, 2001). This puts the leader as a central key in solving social issues through the analysis and determination of potential problems that may occur during the team processes. He/she is responsible of creating a relevant plan to solve these potential issues and is able to apply them taking into consideration any social complexity (Zaccaro et al, 2001).

While transformational and transactional leadership styles (Bass, 1985), discussed previously, aim to explain leadership on the basis of specific behaviours and patterns that a leader may show while leading his/her followers, functional leadership is explained by any mean a leader may use in order to achieve the goal of the team. It is defined as the creation of solutions that aim to achieve team’s goals (Zaccaro et al., 2001). Furthermore, Hackman and Walton (1986) explain that functional leadership varies from the other leadership models as the definition moves from what they must do to what has to be done in order to achieve team efficiency and be able to achieve the target goals.

The functional leadership approach focuses on satisfying the demands and needs of the team in order to increase team effectiveness and achieve the team’s objectives. To understand how leadership can help the team satisfy these needs, Moregeson et al. (2010) researched on the functions and activities that a functional leader has to perform to satisfy these needs and help the team properly. These leadership functions align with the team processes and phases that have been discussed previously from Marks et al. (2001).

Leader’s Role During the Transition Phase

This first phase consists on framing the activities of the team and structuring them, as well as arranging the work and assessing the team’s abilities in order to be able to reach the final objective. This phase does not consist on immediate and direct assignments but on the structure of the future work, or on a reflection on past activities, to insure a maximum of effectiveness. Here, the main leadership functions consist on choosing the

right people; try to have an appropriate team size; describe the mission and goals of the team as well as the mission of the organization and the expected performance; analyse the team environment; and make sure that everyone understands what is expected from them (Morgeson et al., 2010).

Under this phase, we can see that there are multiple functions that will help the team leader make it a successful phase (Morgeson et al, 2010). First, we have *compose team*. This phase is critical for the team's future as it is the basis of the team and will determine the level of performance that it can achieve. Different elements come into consideration while choosing a team, from the individuals' backgrounds and skills, to demographic differences, to the level of differences in personalities that will impact the interpersonal processes of the team (Dahlin, Wingart & Hinds, 2005).

Second, we have to *define mission*. This is about the leader explaining and informing his/her followers about the organization's expectations of their performance, and once that is clear, create a mission specially for the team (Morgeson et al., 2010). This function is as well fundamental in helping the team create its own identity and is the first step towards a flourishing and close relationship between different team members (Dionne, Yamarino & Atwater, 2004). This goes side by side with the team function discussed before *mission analysis formulation and planning* where the team will then analyse the mission that their leader explained to them and start planning on how to get there.

The third leadership function under the transition phase is to *establish expectations and goals* which is aligned with the team function *goals specification*. Here we can observe a dynamic change in the team's individuals' behaviour as they are now the ones responsible for making the goal achievement happen. The leader in this function works together with the team toward the creation and development of team objectives and expectations, as long as individual and team favourable development and learning (Morgeson et al., 2010).

The fourth leadership function that is *structure and plan*. Achieving goals does not come out of luck. This function consists on creating a method on how tasks should be accomplished, divided between all members of the team according to skills and knowledge, and fix deadlines. This will result on a structured plan that the team will be able to follow and that will create coordination between them (Morgeson et al., 2010).

The leader also needs to *train and develop team*. Often during a team task, leaders and team members experience some issues and inabilities to achieve and complete some tasks. As soon as the team experiences any issue, the leader needs to encourage followers to learn, as well as to train and improve the interpersonal processes in order to achieve a better team performance and create a unified team (Morgeson et al., 2010).

Another important function is *sensemaking*. Multiple events may affect the way a team functions: change in the size or in the leadership, change in the assignments, environmental changes. Unless the team is prepared and willing to adapt to these disruptive changes, the functioning and performance of the team will go down. Thus, it is important for the leader to be able to identify these issues, interpret them and explain them to the team (Morgeson et al., 2010).

Finally, the leader has to always be able to *provide feedback*. In a social environment like a team, feedback is extremely important and has a big impact on how to keep the team function, maintain and develop the team throughout time. The leader needs to give constructive feedback to his/her followers in order for them to understand what they are doing good or wrong in order to change it and be able to save the team efficiency (Morgeson et al., 2010).

Leader's Role During the Action Phase

The action phase consists on focusing and completing the tasks that will lead to the final goal and achieve the team's mission (Marks et al., 2001). During this phase the leader has to assist his team in order to achieve a better performance. This can be made by a number of specific functions. *Monitor the Team* is one of these functions and has as a main purpose to manage and assess teams' work evolution; handle the resources offered to the team (external and internal); oversee the environment and evaluate team member performance (Morgeson et al., 2010). It is the function that supports the team functions *monitoring progress toward goals, systems monitoring and coordination*.

A leader has also to *Manage the Team's Boundaries*. This function is about monitoring the relationships between the team's context/organization and its members through handling the communication between the team and key players in the organization (e.g. companies' board, leaders and other teams) and by the integration of it's activities and tasks with the rest of the organization's projects (Morgeson et al., 2010).

Challenge the team function suggests that the team leader has to, from time to time, challenge the ideas and work methods that the team is using in order to reach their final goal. This is important as it will make the team question their work and see if what they are doing is right. This is also important as it pushes the individuals to think about new ways to do things and to be more open to changes in their own work (Morgeson et al., 2010).

The leader should also *perform team task*. This means that the leader has to engage more with the team's work by helping directly in the tasks accomplishments and interfering with team member's activities if necessary. This function represents the part where the leader has to show much more action than before. It is where he is in the field and working hand in hand instead of just managing from far and overlooking at the work of the team (Morgeson et al., 2010).

The key function *Solve problems* is relevant in leadership general theories. As has been defined before, leadership is related to not only managing but also as a crucial element in solving social problems. The leader has to identify the problem, search for relevant solutions and try to solve the issues as fast as possible (Morgeson et al., 2010).

Provide Resources is about the provision of resources, and it can be done through giving relevant information about the activities that the team is working on. This is linked to *information search*. It is mandatory for the team to have the appropriate resources in order to work on their tasks. This function is key to success as it shows the team that their work is important for the organization thus boosting for their motivation in accomplishing and achieving the final objectives (Morgeson et al., 2010).

Another function is *Encourage Team Self-Management*. This function aims to push the team to rely on itself to manage their activities and to perform leadership functions when the leader is absent. Manz and Sims (1980) developed a theory on self-management in teams that proposes that by pushing the team to solve problems and perform their usual activities by themselves without the help of the leader, and by searching for their own resources instead of relying on the leader to bring them, the team grows into a more flexible and stronger unit (Manz & Sims, 1980).

The final leadership function is *Support Social Climate*. It is crucial for the leader to be able to manage the social interactions of the team and to make sure that the relationships

between the different members stay good in order to not impact the team's performance (Morgeson et al., 2010). It is possible to use this function in multiple ways. It can be through the leader showing respect to the team members, showing support and compassion and showing that he/she cares about the social issues that may occur between different teammates (Schminke, Wells, Peyreitte, & Sebor, 2002). Numerous researches have shown the importance of these social interests of the leader toward the team. Leaders who showed to their teams that they are present and caring were seen as "superior" than others who did not (Morgeson et al., 2010).

This function is aligned with the third group of team processes described before from Marks et al (2001) which are the Interpersonal processes of teams. This is why during the research we will consider it as a function of team leadership relevant throughout both phases and not only a sub function of the Action Phase. We will so consider three groups of leadership functions: Transition phase functions, Action phase functions and Support Social Climate function.

Emotional Intelligence and Leadership

Intelligence has been defined in multiple ways and has mostly been related to a person's ability to act with purpose, to be able to have a rational thinking and have a sense of logic, as well as to efficiently be able to interact with the environment around. This definition by Weschsler (1939) is the most common definition of intelligence.

This definition as well as others do not take into account emotions but only state that emotions are important to interact with the environment and with other individuals. In fact, emotions have been described as interruptions and disturbances in individuals lives and should be controlled in order for them to not restrain our lives (Salovey & Mayer, 1990). This definition evolved over time to describe intelligence as a structured response, through different psychological mechanisms. They emerge as a response to external or internal events and can be related to moods, even though they last much shorter and are more profound (Salovey & Mayer, 1990).

Nevertheless, things have changed during the past decades when different types of intelligence started to be defined and emotions started taking an important place in defining intelligence. Another type of intelligence called Social Intelligence was developed as a construct, defined as "the ability to understand and manage men and women, boys and girls, to act wisely in human relations" (Thorndike, 1920, p. 228). It is as well defined as the capacity to discern one own personal and other's feelings, to be able to understand other's intentions and to act accordingly to them (Thorndike, 1920).

Social intelligence is the general type of intelligence that is related to emotions. Within this concept, the idea of an Emotional Intelligence was developed. It has been described by Salovey and Mayer (1990, p. 5) as:

"The ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions."

Moreover, Goleman (2004) related emotional intelligence to leadership. He first described emotional intelligence as a set of five skills. The first being *self awareness* and is about knowing one self's own abilities, strengths and weaknesses, being able to define one's own goals and values and how they may have a repercussion on others. The second is *self regulation* and is based on the ability to control one's mood and excessive negative emotions and be able to change them into productive features. The third is *motivation* and can be described as a person's passion for his/her job and

willingness to achieve great things in the future in order to improve his/her current position to a much higher one. The fourth is *empathy* which is mainly being able to feel compassion for others and take into account other's feelings and emotions before making any crucial decision. The fifth and last skill is the *social skill*. It requires one's ability to monitor relationships with others and to be able to change their paths in a wished direction (Goleman, 1995).

Goleman (2004) also emphasizes the fact that emotional intelligence is what differentiates a good and a bad leader. Even though the main task of the leader is to get the team to reach the final goal and get the work done, emotional intelligence is, according to Goleman (2004), what makes it possible and is what boosts the performance of the team. Teams are created after all on the basis of individuals, and it is in our nature to create relationships between us. The role of the leader is to be able to manage and monitor these relationships in the best way possible (Goleman, 2004). This goes side by side with what we described in the Support Social Climate function, where it is possible to differentiate between a good and a bad leader according to their ability to manage and monitor other's behaviours and emotions.

Leaders are constantly facing capital decisions and *self-awareness*, for example, gives the leader the ability to know what one's own capacities are and what he can really do. Self awareness also allows him to be self-confident and to show it. It is extremely important for followers to see self-confidence in their leaders in order to be themselves confident on what they are doing (Goleman, 2004). Moreover, when a leader is able to *self-regulate* and to control his/her own emotions, he/she will be able to create a peaceful environment at work and most importantly generate trust among the team (Goleman, 2004). This takes off the fear of the followers to be shouted at or be unfairly judged over their opinion. When it comes to *motivation*, when a leader puts a high goal for himself to reach, he/she will do the same for the team and the organization. Usually, people with this trait are always optimistic about the future and this optimism will reflect in the other individuals' work. This in turn will lead to a much higher commitment of the followers toward the mission of the team (Goleman, 2004).

The last two emotional intelligence skills are both about direct relationships with other individuals. First, a team leader has to be able to understand and perceive the feelings of others in the group and to try to understand different viewpoints and their reasoning.

This will allow the team performance to increase as everyone will feel comfortable expressing themselves and so idea generation will be much higher and diverse. It can also allow the leader to approach someone that he/she perceives as being in need (Goleman, 2004). A leader with empathy will help in retaining good people and so retain the knowledge of the company. This is a very important element in today's complex organizational life which became much more complex and where competition is increasing constantly. This competition is not only based on the products and services offered but on the retention and the recruitment of the best employees in the market. Thus, the lower the turnover rate of the company, the better it will be for its own employees to feel secure and the more it will be able to attract the best people (Goleman, 2004).

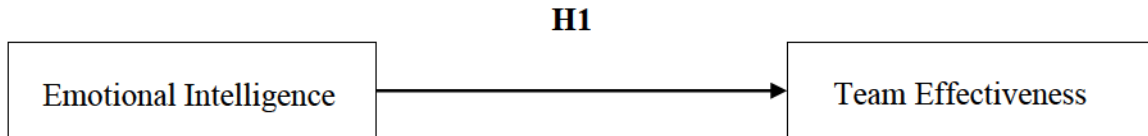
Moreover, coaching and mentoring are very important in leadership and empathy helps in being able to offer a high quality of both. In fact, great coaches develop a good relationship with their followers and are able to understand what really is happening in their heads. This in turn gives the ability to deliver suitable feedbacks and to be able to know when to ask for more and when to refrain (Goleman, 2004).

Second, social skills are not only about a leader being friendly but about being friendly and using this friendship in order to direct people in a desired direction. This skill is important as it uses all the emotional intelligence components at once. A great leader will be able to use his self-awareness, self-regulation and empathy in order to convince and persuade others to follow his lead. When motivation is perceivable by others, and not only internal, it makes these leaders amazing partners as this motivation will become contagious. Social skills give leaders the possibility to express their emotional intelligence and put it in to work (Goleman, 2004).

Emotional intelligence is a very important factor when managing teams. It has been believed and argued by various authors, mainly by Salovey and Mayer (1990) and Goleman (2004), that it has a strong impact on team effectiveness.

Thus, our first goal would be to prove this relationship through our first hypothesis being:

H1: Emotional Intelligence leads to better Team Effectiveness

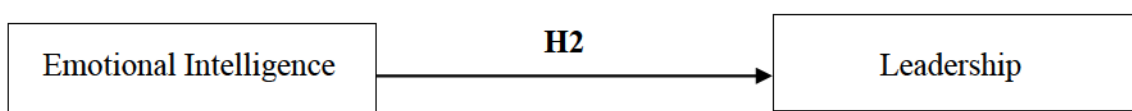


Moreover, through our literature review, different arguments lead us to believe that a leader showing higher Emotional Intelligence has a higher ability to influence his/her followers. Thus, we think that Emotional Intelligence doesn't only have an impact on the effectiveness of the team (H1) but that the more the leader has emotional intelligence the more he/she will be able to lead.

This leads us to our second hypothesis:

H2: Emotional Intelligence positively impacts on leadership

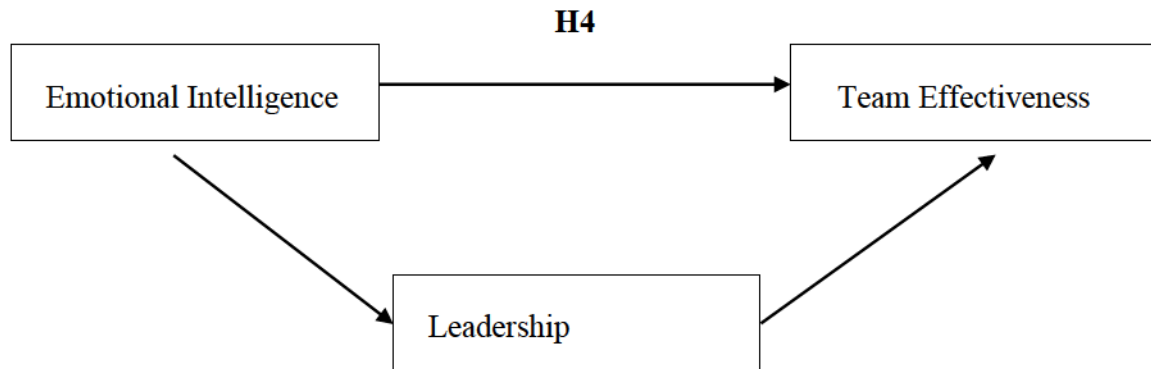
- H2-a: EI positively impacts on Leadership Transition Phase
- H2-b: EI positively impacts on Leadership Action Phase
- H2-c: EI positively impacts on Leadership Support Social Climate phase



This study aims to explore the link between these three important components of leadership: emotional intelligence, leadership and team effectiveness. Through this mediation, we aim to understand the relationship between these three components. More specifically, if Emotional Intelligence impacts Team Effectiveness through Leadership. This means that we would like to see if the Emotional Intelligence has an influence on leadership, and if this relationship is related to better Team Effectiveness.

Therefore, we will combine the previous hypotheses in order to link them together and test our third hypothesis:

H3: Emotional Intelligence leads to better Team Effectiveness, through Leadership



The Impact of Sex on Emotional Intelligence

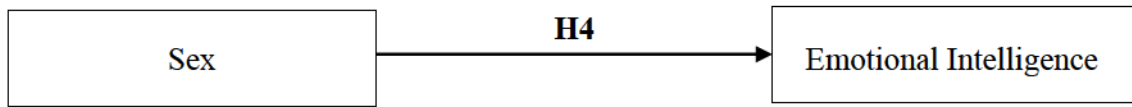
Linguists and biologists agree on the fact that the way women and men are communicating is different. These differences are a result of culture, customs and biological differences (Kelley, 1997). It has been proved that male and female brains are different in the way of thinking and in the way the right and left hemispheres are linked. This link impacts how they perceive external events and the way to react to it and express themselves (Campbell, 2002).

Many studies have been conducted on the gender differences in leadership styles and that demonstrated that men and women show different ways to exercise leadership, even though the differences noticed were very small. In fact, women have been found to rank higher in supporting roles (Gregory, 1990). In a study of Eagy and Johnson (1990), it has been shown that women engage more participation and inclusion styles of leadership, while men showed more structure and controlling styles. Moreover, Bass and Avolio (1994), demonstrated through a study that women show more transformational characteristics than men. They tend to be more influential and inspirational than their male colleagues. The same study shows that men score higher in management-by-exception leadership style than women. This study was not alone in these findings. In fact, Ross and Offerman (1997) relates transformational leadership characteristics that have been identified by Bass (1990), to more feminine attributes rather than masculine ones, and tend to be more risk averse and less aggressive than the transactional leadership attributes.

Nevertheless, even though all of these studies show that women tend to be more transformational leaders than men and that they may show more support to their followers, the emotional intelligence link between these attributes have yet not been justified. In fact, very few studies have been done towards this subject. Goleman (2004) explains that women tend to perceive more the emotions of the others than men and so rank a bit higher in empathy and social skills, yet men show more self-awareness and self-regulation.

These differences between male and female in expressing their emotions, lead us to develop a fourth and final, exploratory, hypothesis. This hypothesis intends to explore whether men and women have significantly different values of emotional intelligence, or if the level of emotional intelligence is independent of the individual's sex.

H4: Emotional Intelligence values are differently distributed between men and women.



Methodology

Procedure

This thesis was written in the context of the Team Effectiveness Seminar, where we were 5 students working on various subjects related to core subject Team Effectiveness. In order for us to work effectively, as our seminar states, we decided to work in group instead of individually in order to collect our data and so increase our sample size. Also, and considering time constraints that could prevent us from gathering a meaningful sample of working teams, we decided not only to collect data in real companies (Real Life Teams - RLT) but also to collect data in a laboratory study, with a convenience sample recruited from our contacts (Laboratory Study Teams - LST).

For the RLT, we chose to use contacts who were working in different companies, in a team environment. These teams are varied in size between 3 and 13 individuals. We sent them our questionnaire by email or personally, based on validated scales, to fill it in individually.

While for the LST, we created teams based on 5 to 6 individuals, where 79% of participants knew their teammates from before the experiment. These teams had to first accomplish a task, represented by a game called Tangram. The goal of this game was to form the maximum number of shapes, in 20 minutes. First the outline of the game was solely explained to the leaders, giving them a sense of responsibility. Then the leader had to go and explain in the shortest time possible, how the game works and divide the tasks among the team members. These teams also filled the same individual questionnaires as RLTs. In the appendix, we present the game instructions, as they were given to the participants.

Both the RLT and LST had in common an appointed leader, as it is the case in many organizational teams.

We had 243 individual participants, with 97 professionals from different sectors (health, oil gas, education, defence sector, food industry, and airlines) and 146 individuals in the LST teams. These participants created a sample of 49 teams. The sample's mean age was 32 years old, with a minimum of 18 and a maximum of 68 years old, with a standard deviation of ($\sigma= 13,14$). Concerning the sex of the participants, we had a total of 108 males and 135 females.

Measures

For this thesis sake, the scales that will be used are:

1. Emotional Intelligence scale
2. Team Leadership Scale
3. Team Effectiveness Perception Scale

The first scale is Emotional Intelligence and is adapted from Rego & Fernandes (2005a, 2005b), Rego, Godinho et al. (2010) and Rego Sousa et al. (2007) work. This scale contains 23 items individuals answer in a 7 points scale, with 1 being “Does not apply at all” and 7 being “Totally Applies”. The participants had to answer whether or not these statements applied to them (e.g “I rarely think about what I am feeling”, “I understand the causes of my emotions”, “I can understand the emotions and feelings of my friends by looking at their behaviour”). The Chronbachs alpha of this scale was $\alpha = 0.81$.

The second scale is Team Leadership Functions scale. It is based on the work of Morgeson et al. (2010) and is divided on the basis of the three leadership functions that were discussed previously, being Transition, Action and Support Social Climate functions. It is answered on a 7 points scale with 1 being “Strongly Disagree” and 7 being “Strongly Agree”. The Transition phase functions includes 8 items (e.g The leader of my team... “Communicates what is expected of the team”, “Ensures that the teams has clear performance goals”, “Monitors team and team member performance”) and has a reliable Chronbachs alpha ($\alpha = 0.94$). The Action phase functions has 9 items (e.g The leader of my team... “Challenges the statue quo”, “Participates in problem solving with the team”, “Requests task-relevant information from team members”) and has a reliable chronbachs alpha of $\alpha = 0.93$. Finally, the Support Social Climate function subscale was composed of 3 items (e.g “Engages in actions that demonstrate respect and concern for team members”, “Looks out for the personal well being of team members”, “Does things to make it pleasant to be a team member”) and has a reliable Chronbachs alpha ($\alpha = 0.90$).

The third scale is the Effectiveness Perception scale that aims to know about the individuals’ perception on how effective was their leader. This scale will be used to determine the team effectiveness perception of the leaders. It is a 7 points scale with 1 being “Strongly Disagree” and 7 being “Strongly Agree”. Moreover, it has 4 items (e.g

“My team is effective”, “My team has a good performance, “ My team has high quality performance”) and has a reliable chronbachs alpha ($\alpha = 0.96$). All of the scales are presented in Appendix 2.

After the collection of all the answers we created a final dataset including all the team member’s answers, with 243 answers.

As the main subject of this thesis is the impact of the use of emotional intelligence on leadership and team effectiveness, and emotional intelligence measure is a self-report one, we tested our hypothesis considering the leaders’ responses only. This sub-dataset includes all 49 leaders who participated in this experiment. The total number of leaders was 49 and included 31 female leaders and 18 male, and had an age mean of 35 years old with a standard deviation of $\sigma = 13,4$.

Table 1 summarizes the reliability analysis results for the scales used in our questionnaire.

Scales	Number of Items	Chronbachs Alpha
Team Leadership -Transition	8	0.94
Team leadership - Action	9	0.93
Team Leadership - Support	3	0.90
Emotional Intelligence	23	0.81
Perceived Effectiveness	4	0.96

Table 1 Reliability Analysis of The Scales

The table contains the most important factor to determine if a scale is reliable or not, which is Chronbachs Alpha. The reliability level starts at 0.7 and as we can see from above, all of the scales that will be used are reliable (the lowest value is 0.807 to the highest with 0.903). Thus, we can continue using them in order to test our hypothesis.

Results

In the next section, we will be describing step by step the way analyses have been made and which analysis options were chosen in order to test our hypothesis.

Our first step will be to run a Bivariate Correlation analysis in SPSS in order to see how our variables are related to each other, to see if they covary. In Table 2 we present the descriptive statistics and the correlations between all the study variables.

	Mean	Standard Deviation	Emotional Intelligence	Leadership	Leadership Transition	Leadership Action	Leadership Support	Perceived Effectiveness
Emotional Intelligence	5.59	0.493	1					
Leadership	5.33	1.205	0.241	1				
Leadership Transition Phase	5.32	1.256	0.242	0.978**	1			
Leadership Action Phase	5.91	1.363	0.216	0.975**	0.919**	1		
Leadership Support Phase	5.65	1.279	0.364*	0.902**	0.868**	0.828**	1	
Perceived Effectiveness	5.49	1.271	0.334*	0.582**	0.532**	0.570**	0.516**	1

Table 2 Correlation Analysis Between Our Variables

This table shows that there is a positive correlation between Emotional Intelligence and Perceived Team Effectiveness, with $r(46) = 0.334^*$ and $p = 0.023$. Therefore, we can say that there is a positive relationship between Emotional Intelligence and Perceived Team Effectiveness

We can also see that there is a positive correlation between Emotional Intelligence and Leadership Support Social climate function, with $r(44) = .364^*$, $p = 0.015$. This means that the probability to have a coefficient as big in this small sample if the null hypothesis was true (no relationship between the two items) is low (close to zero). Thus, we can be confident saying that there is a positive relationship between Emotional Intelligence and Leadership Support Social Climate function.

What is more interesting is that these results show as well that leaders' Emotional Intelligence only correlates significantly with one function of leadership: Support Social Climate. It doesn't correlate significantly with the two other leadership functions which are Action (with insignificant coefficient of $r(42) = 0.216$, $p = 0.169$) and Transition (with an insignificant coefficient $r(42) = 0.242$, $p = 0.123$). Therefore, our H2a and H2b were not supported. Accordingly, the rest of our analyses were conducted only considering Leadership Support Social Climate function.

While correlation analyses help us measure relationships between two items, they still don't tell us if one variable predicts the other one. In fact, regressions help us fit a model to the dataset available and so try to predict a dependent variable through one or multiple variables. In our case, we are trying to understand if Emotional intelligence (as a "predictor variable") predicts Leadership Support (being the "outcome variable").

To test our first hypothesis, a simple linear regression was run. The results are displayed in Table 3 bellow.

Data Set	Independent Variable	Dependent Variable	R ²	SE	<i>p</i>	F-Ratio	β
Leaders	Emotional Intelligence	Perceived Effectiveness	0.111	1.212	0.023	5.508	0.334

Table 3 Regression analysis for Emotional Intelligence and Team Effectiveness

This regression was calculated to see whether we could predict Perceived Team Effectiveness based on Emotional Intelligence of the leader. This regression has been found to be significant ($F(1, 44) = 5.508, p = 0.023, \beta = 0.334$). This regression shows as well an R² of 0.111 meaning that Emotional Intelligence predicts 11.1% of perceived team Effectiveness. This means that we can be confident saying that our H1 is supported: Emotional Intelligence predicts Perceived Team Effectiveness.

We next ran another simple regression in order to test our H2-c. Table 5 shows the results of this regression.

Independent Variable	Dependent Variable	R ²	SE	<i>p</i>	F-Ratio	β
Emotional Intelligence	Leadership Support	0.132	0.112	0.015	6.399	0.364

Table 4 Regression Analysis of Emotional Intelligence and Leadership Support Social Climate function.

This table summarizes the results of the regression analyses testing H2-c. This regression is significant with ($F(1,42) = 6.399, p = 0.015, \beta = 0.37$). It also shows that it's R² = 0.132 meaning that in this set, Emotional Intelligence predicts 13.2% of Leadership Support. This means that our H2-c is supported.

After finding a positive relationship between Emotional Intelligence and Leadership Support Social Climate function, we would like to try to find if it is through this relationship that Emotional Intelligence affect Team Effectiveness (H3).

This hypothesis concerns the mediation role of Leadership Support Social Climate function between one predictor (Emotional Intelligence) and Team Effectiveness. Hays and Preacher (2008) created an SPSS macro that aims to assess the significance of one variable's indirect effect on another variable through the impact of a mediator. This macro was created in order to be used for statistical mediation, moderation and conditional process analysis.

This macro is able to estimate the indirect effect and the significance of models with multiple independent variables, we will only take into account only one independent variable: Emotional Intelligence. This indirect method created by these authors has the ability to test indirect effects in a sample assumed to have no normal distribution, through the use of bootstrapping which is a non-parametric resample method which repeats multiple times the creation of k samples from the original dataset (in this case the: Leaders, Women Leader and Men Leaders datasets) and calculates the indirect effect in our model in each one of these samples. This test will generate an output with confidence intervals for the indirect effects. As the authors recommend the use of bootstrap, and as our sample was rather small (N = 49) our analysis will be based on it.

Our model, as described in the previous scheme, is determined by:

X: Emotional Intelligence

Y: Perceived Effectiveness

M: Leadership Support Social Climate function

X being the Independent Variable, Y the Dependent Variable and M the mediator.

Dependent Variable	Independent Variable	Bootstrapping (10000 samples)		
		Indirect effect with bootstrapping (ab-path)	Percentile 95% Bias Corrected and Accelerated CI's	
			Lower	Upper
Perceived Effectiveness	Emotional Intelligence	0.4801	0.435	1.3553

Table 5 Results of the indirect effect of Emotional Intelligence on the dependent variable Perceived Team Effectiveness through Leadership Support

These results on Table 5 represent the indirect effect for our model with a confidence interval of 95% aiming to test the significance of the indirect effect. The indirect effect of Emotional Intelligence on Team effectiveness through Leadership Support Social Climate function has been found to be significant with 0 falling outside the interval. The interval found was {0.435, 1. 3553}. This significant interval supports our hypothesis H3: Emotional Intelligence leads to better Team Effectiveness through Leadership, more specifically, through the function of Supporting the Social Climate.

Finally, we wanted to understand if there are differences in Emotional Intelligence levels across gender (H4), with values for Female Leaders of (Mean= 5.7, SD= 0.534) and for Male Leaders of (Mean = 5.4, SD= 0.355).

In order to test our fourth hypothesis (H4), considering our small sample size and the differences in the two samples (man leaders' n = 18, female leaders' n = 31), we ran a non-parametric test: the Mann Whitney test. This test is used to see if our variable's level distribution is the same across both categories.

Null Hypothesis	Test	Sig.	Decision
The Mediation of Emotional Intelligence are the same across categories of Leaders	Independent Samples Median Test	0.108	Retain the null hypothesis
The Distribution of Emotional Intelligence is the same across categories of Leaders	Independent Samples Mann Whitney U Test	0.033	Reject the null hypothesis

Table 6 Mann Whitney Test for Emotional Intelligence and Gender (P < 0.05)

The results of our test can be seen in the Table 6. These show that our null hypothesis in this test, which is Emotional Intelligence level distribution is the same across both

categories of Leaders, is rejected. Therefore, H3 is supported: EI is differently distributed across male and female leaders.

We can also observe these results through the histogram in the next page, showing the differences of distribution of the EI means across male and female leaders.

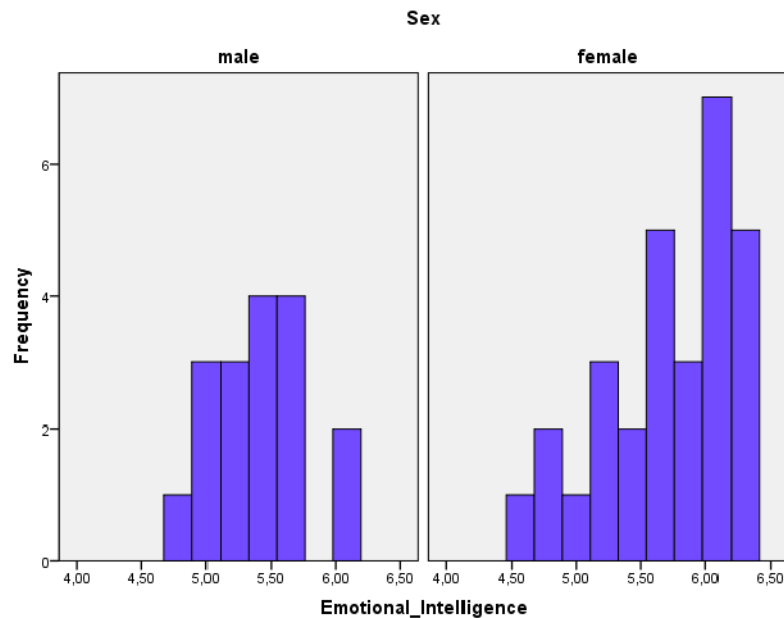


Figure 1 Histogram of Emotional Intelligence across Sex

We can see in the previous histogram that for female leaders, the rates tend to the right; which represent the highest values. While in the male chart we can see that the results are more concentrated in the middle.

To see whether this difference was also significant for the leadership and perceptions of effectiveness, we ran further Mann Whitney tests. However, the results were non significant: women and men leaders do not differ significantly in their leadership functions' or perceptions of team effectiveness' values (Appendix 3).

Discussion of Results and Future Implications

Through the analyses done and the results found, we first concluded that H1 was supported. We found that there is a positive relationship between Emotional Intelligence and Perceived Team Effectiveness. This means that having a leader with higher values of emotional intelligence may lead to higher team effectiveness. So while leading a team, the leader needs to show support, to coach and to motivate, and show that he is there for his followers. He/she also needs to be self aware, to be able to self-regulate, to feel empathy, motivate and to have social skills. This may give the individuals a more secure feeling. In fact, it will make them feel that there is someone ready to help in case of emergencies and that there is always someone to count on. It is very important that people feel this way, as a constant feeling of fear is extremely negative toward the performance of the individuals and so of the team. This goes side by side with the feeling of being lost in the steps that the leader arranged in advance, without controlling how things are going. If team members don't feel that their work is appreciated or recognized, or that the information they are providing is misused, they may stop sharing information (Bandow, 2001). All of these emotions can be related to trust. Trust in teams can be defined as a mutual perception between the individuals of the team, that the other members will behave in a specific way in order to secure and defend the benefits and interests of all the teammates (Webber, 2002).

Indeed, trust affects multiple group works aspects as: participation, exchange of information, quality of the work and output, and most importantly the retention of team members and so of the employees (Bandow, 2001). For example, if a trust environment is not set within a team, it is very likely that team members start to miss-interpret other's behaviours and will start feeling that things like missing a deadline, or being absent in a meeting is done on purpose and has a hidden intention (Salas, Sims & Burke, 2005). Thus we recommend that companies should start emphasizing on the importance of team building, in order to bring employees together and create a peaceful environment.

Moreover, our findings suggest that Emotional intelligence has a major role in only one of the leadership functions: support the social climate (H2-c). This is in line with our literature as both Interpersonal processes (Marks et al., 2001) and Support social climate function (Morgeson et al., 2009) are the moments when the emotional intelligence dimensions described by Goleman (2004) might be more relevant for leaders and teams. In fact, during those processes, that occur both in the transition and action phases, the

leader's main role is to manage the social interactions and relationships that have been created between the members of the team. As our literature suggest, the interpersonal processes that the team and leader are involved in, are relevant during all the time the team will be working together. So even though the results don't show a direct impact of emotional intelligence on the transition and action functions of the leader, it may influence both transition and action processes by the support of the social climate.

Furthermore, we tried to link the first hypotheses together which led us to H3. Through this hypothesis and its analytical results, we found that emotional intelligence impacts team effectiveness through the leadership function of supporting the social climate. This does make sense as leaders use emotional intelligence skills in order to promote a good social climate within the team, that allows them to work better toward their final goal and try to achieve higher performances. We could see that there is a correlation between emotional intelligence and perceived team effectiveness, but this doesn't tell us through what this impact is done. This third hypothesis makes the link between the three variables, enhancing the fact that leaders' emotional intelligence is relevant for the function of supporting the social climate. The more the leader is supportive for his followers, the higher the performance of the team will be.

Finally, what is also interesting for our topic is the findings of H4. Indeed, H1, H2 and H3 give us results that should be applied for all leaders, regardless of them being male or female. H4 shows that men and women don't have equivalent values of emotional intelligence, and that women leaders showed higher emotional intelligence values than men leaders. These results don't mean that men don't have emotional intelligence but that they have it in different degrees. We believe that women interpret better their own and others' emotions. They are more willing to coach and to try to deal with personal relationships and interpersonal matters.

This study leads us to think, that the emotional intelligence of leaders in general is most relevant for the functions that are related to the management of interpersonal relationships. Moreover, that women leaders score higher than men leaders in emotional intelligence. Nevertheless, it is possible that some men may have higher emotional intelligence than women (Figure 1). Thus companies should consider their leaders not exclusively based on their sex but on their level of Emotional Intelligence. This means that Emotional Intelligence should be seen as a main skill for good leadership.

For example, in the selection process, group dynamics and group tasks can be created in order to see how individuals interact with others and how they behave in specific scenarios.

The good news is that Emotional Intelligence can be tough and practiced in order to improve it. These trainings consist on helping the employees get rid of their old practices and start developing new ones. This process takes a lot of time as it is not a group training but an individual one. Yet, if taken seriously by the participant, it may lead to amazing results in the long run and to the change of bad habits. This process is very complex and very personal. Only attending a lecture or listening to a coach for couple of hours, won't help changing these things. It is all about the willingness of the individual to change (Goleman 2004). Companies may try to boost the employees to recognize the need through events and conferences where they can invite inspirational leaders to talk about themselves, or invite leaders who recognized this willingness to change and decided to share it with others in order to motivate others to follow the lead.

These results will hopefully be taken more into account in organizations while appointing high managers and top leaders. We hope that in the future, the importance of Emotional Intelligence in Leadership will be taken more into account, and that the high levels of Emotional Intelligence of women will be more recognized and so that they will be more empowered than they are now.

Limitations and Further Development

Even though this study contributed to the study of the leaders' emotional intelligence and its importance for team effectiveness, for both men and women, it has some limitations that have to be mentioned. The first limitation is the sample size of this study. In fact, the initial number of participants was 249 individuals who were then assembled in 49 teams, giving 49 leaders. This study bases itself not on the team and individual results, but only the leaders' results. This is good for a study as this one in order to analyse leaders' perspectives but future studies should also take into account the whole team in order to take both perspectives.

Furthermore, as this study wanted to examine the impact of sex in emotional intelligence, we had considered analysing the 49 leaders separately: male and female leaders. The problem here is that the female number of leaders was much higher than the male number of leaders, with 18 male leaders compared to 31 female leaders. Also, this number of participants is below the recommended for running regression analysis (Tabachnick & Fidell, 2013). Thus, it is important to state that if the number of male leaders was a higher or equivalent, the results could have been different. Furthermore, as the leaders' sample is small, it is not really possible to make generalizations of the results for the whole population. Thus, we would recommend future researchers with a higher number of team leaders, to go deeper and search for more results.

Moreover, the surveys that have been designed were based on self-evaluation, meaning that individuals had to auto-report themselves. This type of survey can give biased results in terms of the evaluation of the effectiveness of the team. In fact, even if the perception of effectiveness of the leader is very important, it is also important that the team feels the same as sometimes this perception can be completely different. While some leaders feel that their teams are very effective or the opposite that their teams are not performing well, other members of the team can feel that actually the team is not doing so great or that the leader has a pessimistic perception of their work. So, future studies should use the perceptions of the team members as a dependent variable, as well as objective measures of performance.

Future studies could also address the possibility that different dimensions of emotional intelligence are related to different leadership functions. In fact, we think that *self-awareness*, *self-regulation* and *motivation* could be very important in the first two

leadership functions, which are the Transition and Action functions, described by Morgeson et al. (2010). Nevertheless, these skills might be more important during the Action phase rather than the Transition phase, as the later one is based on the leader's ability to frame and monitor the team's structure and future activities while the former is about direct actions of the leader while guiding the team to the final goal. During this action phase, the team will be working on achieving objectives and tasks and so will need the full attention of the leader. Thus, the leader should show: *self-awareness* through showing confidence about the direction of the team; *self-regulation* by monitoring his/her own emotions and those of the followers; and finally provide *motivation* for the team to do their best in order to achieve the highest performance possible. Moreover, the two remaining Emotional Intelligence skills, which are *empathy* and *social skills* are in line with what is expected from the leader considering the Support Social Climate function, where the leader is expected to show emotional and personnel support.

Finally, future researches should focus more on real world teams that have been working together for a longer time, which will bring more relevant and stronger results. In fact, this study included 49 teams with real world teams from companies and others that have been created for the purpose of this study ("laboratory study teams") as the time was restricted to increase the number of long-term teams.

Appendix

Appendix 1 Tangram Task

TANGRAM

Tangram is a puzzle-like game that consists in 7 shapes, called *tans*, that can be organized into figures. The goal of the puzzle is to construct figures using all the 7 shapes, without overlapping them.

You have a representation of the shapes in the next page.

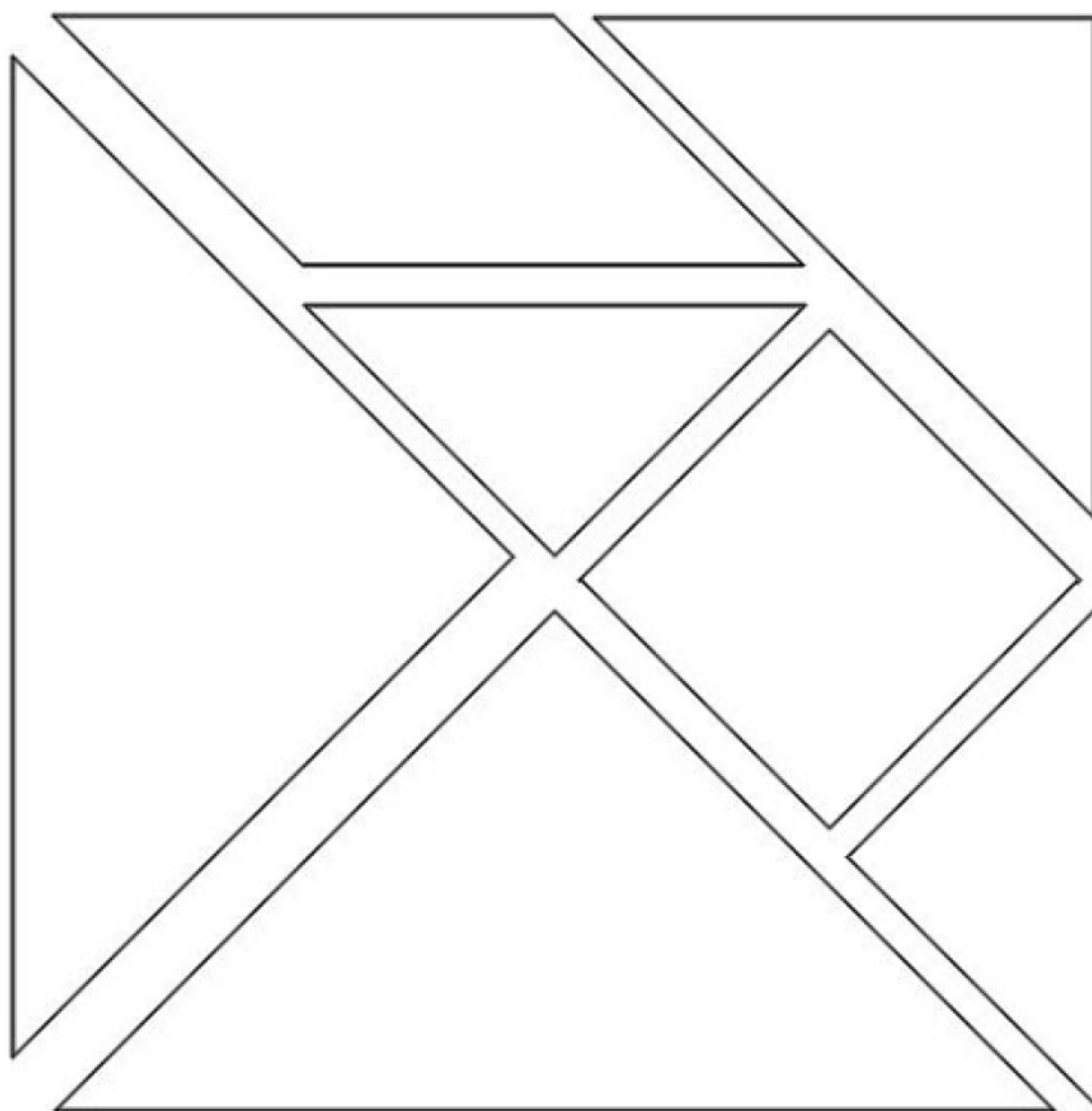
Your task is to **build the maximum of figures possible, from the list provided in page 3, in 20 minutes.**

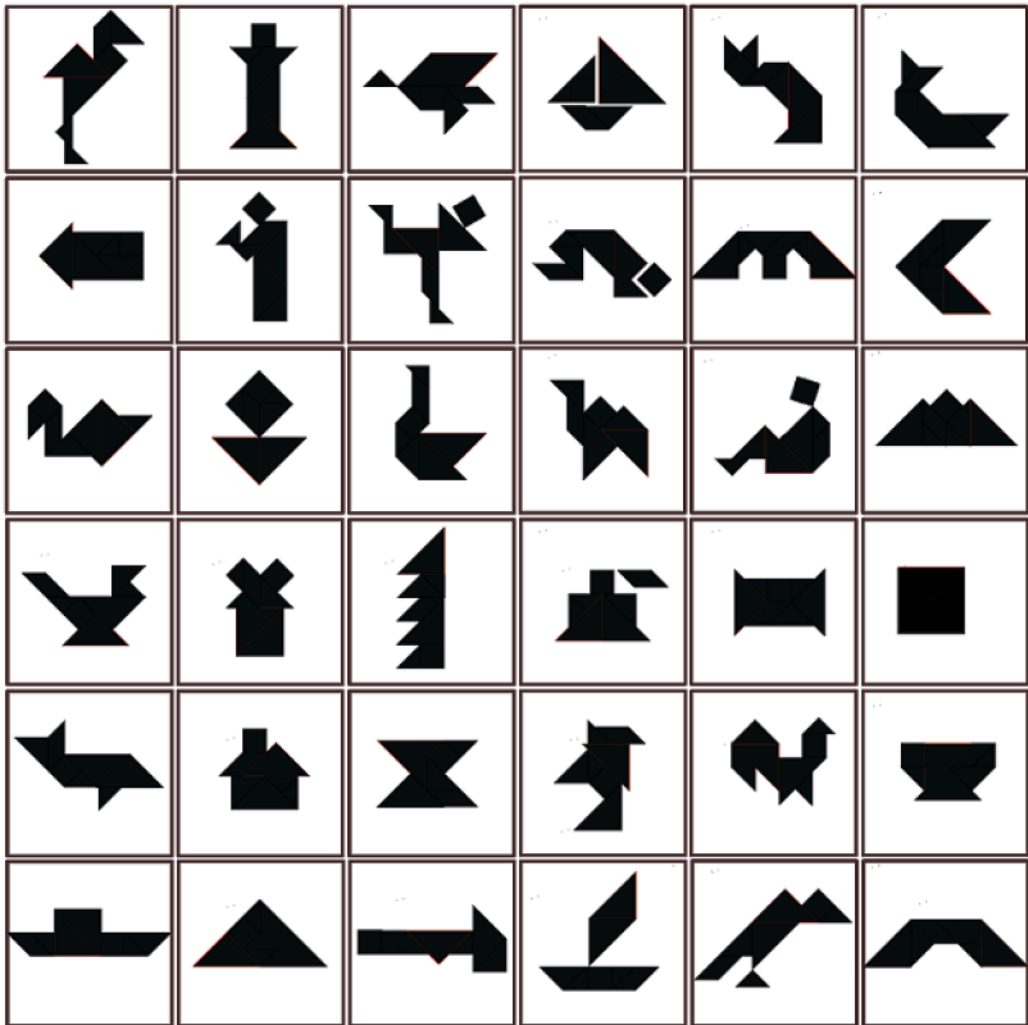
In the end of those 20 minutes, you have to decide, from the figures that you have actually build, which one will be the logo for your team and why.

In the end of the study, the team who builds the highest number of figures in less time will win the 30€ voucher.

Rules:

- Do not use the internet – you will be disclassified
- One team member can leave the room once during the 20 minutes, provided that he/she does not take anything with him/her
- You can use any materials you want to
- Please inform the researcher when you finish so that he/she can check if the figure is ok





Appendix 2 Variables Dictionary

VARIABLES DICTIONARY

STUDY QUESTIONNAIRE				
Item	Dimension	Description	Scale	Source
Variable: Leader				
		I am the leader of this team.	1- Yes 2- No	
Variable: Emotional intelligence				
		I rarely think about what I am feeling.	1- Does not apply at all 2- Does not apply 3- Applies a little 4- Applies something 5- Applies enough 6- Applies plenty 7- Totally applies	Rego & Fernandes (2005a, 2005b); Rego, Godinho et al. (2010); Rego, Sousa et al. (2007).
		I understand well my feelings and emotions.		
		I do not deal well with the criticisms made about me.		
		When a friend of mine wins a prize, I feel happy for him/her.		
		I react calmly when I'm under stress.		
		I do not notice my emotional reactions.		
		I am indifferent to the happiness of others.		
		I can stay calm even when others get angry.		
		I feel good when a friend gets a compliment.		
		I never take into account my feelings to guide my life.		
		When I am defeated in a game, I lose control.		
		The suffering of others does not affect me.		
		I can calm myself whenever I'm furious.		
		I understand the causes of my emotions.		
		I am indifferent to injuries in an animal.		
		I'm glad when I see happy people around me.		
		Usually I encourage myself to give my best.		
		I understand well the feelings of the people with whom I relate.		
		I can understand the emotions and feelings of my friends by looking at their behavior.		
		I give my best to achieve the goals I set out.		
		It's hard for me to accept a criticism.		
		Usually I set goals for myself.		
		I know well what I feel.		
Variable: Knowledge of the members				
		Please indicate the percentage (%) of elements of your team that you knew before the beginning of the task (approximately).	0 - 100%	
Variable: Demographics				
		Nationality		
		Occupation		
		Age		
		Sex	1- Male 2- Female	
Variable: Team Leadership				
	Transition Phase	Communicates what is expected of the team.	1- Strongly disagree 2- Disagree 3- Somewhat disagree 4- Neither agree nor disagree 5- Somewhat agree 6- Agree 7- Strongly agree	Morgeson, DeRue e Karam (2009)
		Ensures that the team has clear performance goals.		
		Communicates expectations for high team performance.		
		Defines and structures own work and the work of the team.		
		Works with the team to develop the best possible approach to its work.		
		Identifies when key aspects of the work needs to be completed.		
		Reviews relevant performance results with the team.		
	Provides positive feedback when the team performs well.			
	Action Phase	Requests task-relevant information from team members.		
		Notifies flaws in task procedures or team outputs.		
		Monitors team and team member performance.		
		Reconsiders key assumptions in order to determine the appropriate course of action.		
		Contributes ideas to improve how the team performs its work.		
		Challenges the status quo.		

		Implements or helps the team implement solutions to problems.		
		Participates in problem solving with the team.		
		Helps the team develop solutions to task and relationship-related problems.		
	Support social climate	Engages in actions that demonstrate respect and concern for team members.		
		Looks out for the personal well being of team members.		
Variable: Effectiveness Perception				
		My team was effective.	1- Strongly disagree 2- Disagree 3- Somewhat disagree 4- Neither agree nor disagree 5- Somewhat agree 6- Agree 7- Strongly agree	
		My team had a good performance.		
		My team had high quality performance.		
		My team was successful in the task.		
Variable: Emotions (after task)				
		Upset	1-Never 2-Rarely 3-Occasionally 4-Sometimes 5-Frequently 6-Usually 7-Everytime	PANAS Watson, Clark, and Tellegen (1988) Versão reduzida: Thompson (2007)
		Hostile		
		Nervous		
		Ashamed		
		Afraid		
		Inspired		
		Determined		
		Active		
		Alert		
		Attentive		

Appendix 3 Mann Withney U Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Lead_Tr is the same across categories of Sex.	Independent-Samples Mann-Whitney U Test	.907	Retain the null hypothesis.
2	The distribution of Lead_Ac is the same across categories of Sex.	Independent-Samples Mann-Whitney U Test	.622	Retain the null hypothesis.
3	The distribution of Lead_Sup is the same across categories of Sex.	Independent-Samples Mann-Whitney U Test	.435	Retain the null hypothesis.
4	The distribution of Lead is the same across categories of Sex.	Independent-Samples Mann-Whitney U Test	.745	Retain the null hypothesis.
5	The distribution of PEffect is the same across categories of Sex.	Independent-Samples Mann-Whitney U Test	.942	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

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