

IUL School of Social Sciences

Leadership on Stage

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Dissertation submitted as partial requirement for the conferral of *Master in Social and* Organizational Psychology

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September, 2017

Agradecimentos

Esta dissertação é fruto de um percurso académico de cinco anos, que me proporcionou vários momentos de alegria, de convívio, de desafio, de conhecimento.

Pude partilhar todas essas experiências com várias pessoas que se tornaram num grande apoio ao longo destes anos, desde a minha família que foi incansável, aos meus colegas do ISCTE-IUL, aos meus colegas do BNP Paribas e aos meus amigos que, durante o último ano, principalmente, tiveram sempre uma frase de motivação para me dizer.

Por todo este apoio, Mãe, Pai, Pedro, Mariana, João e Filipa, muito obrigada por sempre acreditarem em mim.

Colegas, e agora amigos, que conheci durante a minha licenciatura e mestrado em Psicologia, tenho a dizer-vos que foram, sem dúvida, muito importantes para que eu conseguisse alcançar este objetivo. Cristiana Alves, Filipa Mateus, Vera Caetano, Nathalie Nunes, Débora Falcão, Mónica Costa, Gonçalo Ferreira, Eduardo Mascarenhas e Filipe Garrett, obrigada por todos os momentos que passámos juntos.

Também no contexto do mestrado, cruzei-me com duas pessoas muito especiais, que sempre tiveram do meu lado, tanto a nível pessoal como profissional. Mariana Ribeiro e Bruno Silva, obrigada por me acompanharem e apoiarem em todos os momentos pelos quais passei nestes dois últimos anos.

Márcia Pasadas, Fábio Silva, Tatiana Camarão, Sofia Ramalho, Raquel Filipe, Pedro Ramalho, Sara Pinheiro, Rita Macedo, Anabela Silva e Maria João Gouveia, agradeço do fundo do coração todo o apoio para terminar esta etapa académica. Passaram dois anos desde que estou no BNP Paribas e só posso agradecer por toda confiança pessoal e profissional.

Quero também agradecer ao meu grupo de amigos por todo o carinho, consideração e motivação. Não teria conseguido conciliar trabalho, com estudos e vida social, sem vocês do meu lado. Indubitavelmente, Rui Alexandre, Tiago Silveira, Sara Meirinhos, Valter Nepomuceno, Biza Runte, Priscila Cunha, Zé Santos, João Santos, Mariana Seixas, Inês Clímaco e Alexandra Santos, obrigada, muito, muito obrigada mesmo.

Por fim, resta-me agradecer ao Professor Nelson Ramalho, cujo o apoio foi fulcral para que esta tese fosse realizada com sucesso. Professor, muito obrigada pela sua flexibilidade, disponibilidade e prontidão em ajudar-me. Foi uma honra tê-lo como orientador.

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Abstract

In dynamic and fast-changing markets leaders are required that go beyond transactional logics, being able to be creative, to improvise, and articulate dynamic capabilities. This description goes more in line with the profile of a choreographer than that of a chief executive.

This study is intended to test whether transformational leadership is backed up by individuals' RIASEC profile of a choreographer (Artistic, Social, and Enterprising) in comparison to that of a chief executive (conventional and enterprising). Hence, it intends to test the value of implementing arts-based methods in analytics-based courses.

With a sample comprising 117 participants, we tested differences in leadership style against respondents' academic background (59 individuals with creativity-based education and 58 respondents of analytical-based education) as well as RIASEC predictors of transformational leadership in each group.

Results show no significant differences in the style of leadership associated with respondents' academic background. Nevertheless, the hypothesis that defines a positive association between the choreographer profile and the transformational leadership, in the sample group of the analytical-based individuals, is corroborated.

Keywords: Transformational and Transactional Leadership; Creativity and Innovation; Competitiveness; Performing Arts.

Resumo

Mercados dinâmicos e mutáveis exigem líderes que ultrapassem a lógica transacional, sendo capazes de ser criativos, de improvisar, e articular capacidades dinâmicas. Esta descrição assemelha-se mais à de um coreógrafo do que de um CEO.

Este estudo procura testar em que medida a liderança transformacional é reforçada em indivíduos com um perfil RIASEC de um coreógrafo (artístico, social, empreendedor) comparando com o do CEO (convencional e empreendedor). Desta forma pretende testar o valor da implementação de métodos de ensino de base artística em cursos de base analítica.

Com uma amostra de 117 participantes, testámos diferenças no estilo de liderança de indivíduos com diferentes bases de formação (59 indivíduos de cursos de base criativa e 58 de base analítica).

Os resultados não mostraram existir diferenças estatisticamente significativas no estilo de liderança entre os tipos de formação. Contudo, a hipótese que propunha uma associação positiva entre o perfil do coreógrafo e a liderança transformacional dentro do grupo de base analítica foi corroborada.

Palavras-chave: Liderança Transformacional e Transacional; Criatividade e Inovação; Competitividade; Artes Performativas.

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Introduction

From the beginning of the 1970s, globalization starts to be felt worldwide, beyond the worldwide economic crisis, originating an international competitiveness what caused tension among companies, hence new necessities emerged (Pacheco-ornelas, Cuevas-rodríguez, Rodríguez, 2012). The adaptation of organizations to this new business world was mandatory, otherwise remaining in the market would not be feasible. This adaptation embraced the restructuring of companies' principles, goals, and resources, with human capital gaining the status of the main competitiveness tool (Bird & Mendenhall, 2016).

Considering the new era characteristics, modern society is requiring specific competencies that match the market demands, among which, creativity, innovation, entrepreneurship and capacity of improvisation and adaptation to the environment (Choudhary, 2014). These skills' development allows organizations to create new work tools, to see beyond what is obvious, and consequently to be more competitive. In other words, creativity and innovation are recognized as key-competencies, being the cornerstone of efficiency on a globalized world (Adler, 2006).

Leaders have a fulcrum role on this, at several levels, as for instance on organizational culture. Individuals with higher hierarchical positions have the decision-making authority to define and instill values, principles and rules which should guide employees' behavior and performance (Bozic & Olsson, 2013).

Accordingly, transformational leadership seems to be the most predictable of organizational effectiveness (Hoogh, Hartog, & Koopman, 2005). It is anchored on the transformation of organizational performance and envisioning different kinds of working. At the same time, leaders must stimulate, inspire, and motivate employees on goals achievement, considering creative and innovative procedures. Teamwork and brainstorming are also fostered by transformational leaders, due to their contribution on creative ideas genesis (Baesu & Bejinaru, 2015).

Traditional theories represented by transactional leadership approach depart from the assumption that rational procedures and task-focused behaviors as well as a contingent reward suffice to maximize leaders positive influence on the organization. Although transactional leadership was considered adequate it lacks creativity and innovation, that became imperative in modern societies (Yulk, 1996).

Although this knowledge is taught on management courses it is not without surprise that transactional leadership principles endure as the mainstream ideas in the way

management education is developed, farther from arts (Mintzberg & Gosling, 2002). Often students are tacitly taught that managers will perform leadership functions which is an incorrect assumption, due to their distinct roles and responsibilities, being directly associated to different competencies (Lunenburg, 2011). For instance, the unconventional nature of leadership attitudes and behavior in promoting radical innovation breaks apart from the assumption that leadership competencies are synonym of managerial competencies.

In this sequence, other educational areas comprise and develop the skills required to remain competitive such as performing arts courses (Nastase, & Barbu, 2011). These courses are undoubtedly based on creativity processes and consequently achieve innovation in the end of all work processes (Taylor & Ladkin, 2009). Leaders have a critical role in this way, due to their responsibility in inventing and stimulating their subordinates to engage in other types of strategies not only to replicate but to be more competitive and successful. *"Twenty-first century society yearns for a leadership of possibility, a leadership based more on hope, aspiration, and innovation than on the replication of historical patterns of constrained pragmatism*" (Adler, 2006, p.487).

Due to its characteristics, performing arts can fill in the gaps analytic courses have regarding leadership competencies. Nevertheless, artistic leaders training, as for instance choreographer, is ignored and not enough recognized as an advantage to enhance leaders' performance.

In assessing leadership and managerial competencies, many constructs have been used to capture the critical factors that allow the identification of leadership potential (e.g. dispositional measures such as personality traits), the training of leadership (e.g. KSA), or evaluating leadership effectiveness (e.g. team productivity) (Mount, Barrick, Scullen, & Rounds, 2005).

The current study anchors on Holland's RIASEC model (1959 *cf.* Armstrong, *et al.*, 2008), which identifies six types of personality/interests: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C). Its basic assumption is that there is a link between individuals' features and their workplace / function (McDaniel & Snell, 1999). This model has been considered in literature as one of the most useful not only in Academia but also at official level. For example, *O*Net OnLine*, a job classification system built by the US Department of Labor, considered Holland's theory within job descriptors identifying a specific RIASEC profile for each job position (Armstrong, *et al.*, 2008).

A good example of such endeavor is the CEO profile which comprehends several features involving tasks, technology skills, knowledge, skills, abilities, work activities,

detailed work activities, work context, job zones, education, credentials, interests, work styles, work values, related occupations, wages and employment trend, job opening on the web, sources of additional information. Such description highlights the Realistic and Enterprising interest domains of Holland. These are not compatible with the depiction of leadership as contrasted against management by Lunenburg (2011).

Judging on another dimension used by O*Net, work styles, "Leadership" is obviously not an exclusive of top management jobs such as CEO but rather extensive to many different occupations among which the highest ranked are: Chief Executives; Coaches and Scouts, Airline Pilots, Co-pilots and Flight Engineering, Music Directors, and Choreographers (O*Net, 2017).

It is rather interesting to spot choreographers among the top positions in leadership as a work style as their job functions sharply contrast in many ways with those of a CEO. However, judging one the RIASEC profile linked with choreography, ASE, would have a closer match with the expected profile of a leader than CEO. Thus, the pattern of differences between CEOs and choreographers apparently parallel the pattern of differences between managers and leaders stressing the conventional domain in the former and the social and artistic domains in the later. Enterprising is a common denominator (O*Net, 2017).

This led us to question: to which extent do art-related dimensions (artistic interest, sensitivity, intuition, improvisation capacity, *etc.*) are necessary to be a leader more than a manager?

The closest construct to management (Lunenburg, 2011) is transactional leadership. Transformational leadership (Bolden, Gosling, Marturano, & Dennison, 2003), on the contrary, closely matches the depiction of Leadership as Lunenburg (2011) did. Thus, one would expect transformational leaders to show higher artistic interest in RIASEC as compared with transactional. Transactional leaders should rank high in conventional and enterprising and transformational leaders should rank high on artistic, social, and enterprising.

All in all, organizational leadership studies have been enduring in searching for the best attributes and behaviors that add value to teams and organizations via its leaders. Although the body of literature and sources of inspiration has been extensive there is a lack of bridging business with the artistic world, that, somehow is also a stage for leadership action, especially in the performing arts. This study contends that choreographic competencies may offer a response to challenges facing leadership and thus its study may help to enrich the knowledge on future effective leadership requirements. Specifically, the current research aims

to test to which extend arts-based methods offer an advantage for analytic-based courses, allowing students to develop key leadership competencies.

To explore this idea, we opted for a quantitative study of an explanatory nature, due to its objective to inform and explain the occurrence of a specific phenomenon (Dalfovo, Lana, & Silveira, 2008). As it is grounded on comparative purposes it focuses empirically on two groups – Performing Artists vs. Managers as representatives of creativity-based and analytical-based courses respectively.

The remaining of this study follows by reviewing literature focused on the role of innovation and creativity in market competitiveness, linking it to leadership development and stressing differences between leaders and managers. It then moves on to detail these differences stating hypotheses on transformational leadership and RIASEC profile. After showing methodological options concerning procedure, sampling, measures, and data analysis strategy, the study shows results and discusses it against the set of hypotheses. It then concludes and acknowledges limitations and offers suggestions for future studies.

Chapter I – Theoretical Framework

1.1 Market competitiveness: Innovation and Creativity

The first decade of the XXI century was marked across societies by economic and financial crisis. This was extensive to industry, pharmaceutical sector, and other types of segments, from small businesses to large enterprises (Vlăsceanu, 2003). The ensuing instability was felt worldwide ever since, and constrained companies to reorganize their priorities, work processes and employees' competences. This echoes Katz & Kahn (1978) idea that organizations and societies are mirroring patterns of behavior.

Additionally, the many organizations that exist around the world are suffering from globalized pressure since 1980 (Bird & Mendenhall, 2016). This process is causing a lot of competitiveness between organizations to remain in market business, since it "...*concern with the long term performance of the subject related to its competitors (...) and with what factors lead to being competitive, as well as how it can be achieved.*" (Man, Lau & Chan, 2002, p. 126). Further, the crisis deepens this conflict. These are the main reasons to focus and develop employees' competences "...*since competences constitute one of the pillars that enable companies to be competitive.*" (Pacheco-ornelas, Cuevas-rodríguez, & Rodríguez, 2012, p.17).

Based on literature review, there are two types of competences; intrategic and strategic. The first one, look into collaborators' capabilities inside the organizations, as opposed to the second term that means the individual's capacity to deal with the external environment. Both one and the other reveal the employees' capabilities, routines and resources what enable higher levels of competitiveness, and consequently, create a higher value for customers (Pacheco-ornelas, Cuevas-rodríguez, & Rodríguez, 2012).

The improvement of individuals' competences and consequently the increased competitiveness is fundamental nowadays to take advantage in business market. The organizations are no longer seen as closed systems that work alone. This traditional perspective was replaced for open system approach that means companies depend on each other because their functioning is based in "...*transformation of energy from the environment, the through-put or transformation of the imported energy into some product form which is characteristic of the system, the exporting of that product into the environment, and the reenergizing of the system from sources in the environment."* (Katz & Kahn, 1978, p. 4).

Therefore, the relationship between enterprises is simultaneously of dependency and competitiveness. It is, mainly, the latest factor that force organizations to follow other alternatives, in order to empower their progress and organization efficiency and effectiveness¹ (Pacheco-ornelas, Cuevas-rodríguez, Rodríguez, 2012).

Literature review focus, chiefly, in the organizations' innovation adoption as the most competitive advantage element and the key of change adaptation. Currently, companies that do not integrate innovation in their workplace, are not prepared to face market obstacles and hence will perform below maximum. Additionally, the potential clients would decide for other organization which fit their requirements better (Choudhary, 2014). This decision making has a reasonable fundament, since innovation means a development and implementation of an idea or a behavior that is new to that context and help to improve its services, products, processes, technology and even practices (Damanpour & Schneider, 2208). At the same time, this construct includes creativity which does not have one definition, due to its complexity, nevertheless this construct can be translating as something new that is done, based in old ideas, processes, services, and improve it to add value. This is the most important innovation component that anticipate any kind of innovative process (Yuan, Woodman, Texas, Wood, Zhou, Guthrie, Li, Shin, West, May, & Lee, 2010).

According to Ivan G. Siedenberg, former chairman and CEO of Verizon, "creativity is the one irreplaceable human skill in an increasingly automated world... the only sustainable source of competitive advantage." (Adler, 2006, p.497). To create is more than being an artist, it is to be "actualizing our potential" (Young, 1985, p.77) and thrive ourselves into the unknown. This process of discovery forces us to see the reality as it is, that is fundamental for new business vision (Adler, 2006). Associated with this construct, we can find the innovation concept as mentioned before, in order to be able to develop and implement an idea. It is not enough to have good conclusions, if those are not matching with the reality and with the necessities of the society. Since we are in an age of revolution, innovation appears to bring activism to business world as dream, creativity, exploration, invention and imagination. With these inputs, companies can be successful in their business, creating new models, new ways to add value to their employees, customers and suppliers. Business concept innovation is the right approach to be competitive, based in creative practices and ideas. According to Hammel (2000), we can find four major components: core strategy, customer interface, value network

¹ Efficiency means the better way to manage the input and the output, or the proportion between them. Effectiveness is related to the accomplished goals. To differentiate these concepts, could also put in two questions: Efficiency "How to do?" and effectiveness "What to do?" (Robalo, 1995).

and strategy resources. Firstly, it is important to choose the core procedures to implement, define the mission and planning how business can achieve the goals delineated; customer interface englobe, for instance, the channels that are used to reach the customers and the information that is transmitted; value network is concerned about companies networking and how stakeholders can be enhance the entrepreneurship visibility; at last, strategy resources, as one of the most value business tool, covers the basic competences which are required now a days, strategic assets and the main processes (Hammel, 2000).

Many perspectives diverge in their explanations, although the most used is centered on cultural environment and its main components that influence organizational innovation. Organizational culture, despite of the many definitions in literature, can be translated as "...those meanings, conceptions, and interpretive schemas that are activated, constructed, or brought on line through participation in normative social institutions and practices..." (Shweder and Sullivan, 1993 *cf.* Bozic & Olsson, 2013, p. 63). This means culture comprehends values, norms, and beliefs that are shared between employees and, at the same time, it controls all dynamics, processes, and methods within organizations. In this sense, the norms and principles implemented in any company will be directly associated to creativity and innovation levels of working procedures (Jaskyte, & Dressler, 2016). Specifically, "...freedom and autonomy, risk taking, strong teamwork/collaboration and close connection with customers and other external sources of ideas and knowledge..." are the cornerstones. (Bozic and Olsson, 2013, p. 64).

Innovation is to Daft (1982 *cit in* Jaskyte, & Dressler, 2016, p.25) inherently a social process. This means innovative ideas implementation only occurs if other individuals involve. Additionally, cultural innovation depends also on leaders and managers' characteristics, due to their formal power to determine what strategies and goals would be achieved. Thus, to create an innovative environment it is necessary to build a culture that nurtures values such as risk tolerance, teamwork, managers/leaders support, communication between down and top levels, acceptance of different ideas (Choudhary, 2014), "...*sharing information openly, flexibility and adaptability, autonomy, risk taking, results-orientation, creativity, stimulation, challenge, future orientation, cohesiveness, a sense of family, commitment, accepting mistakes, dynamism, and entrepreneurship."* (Jaskyte, & Dressler, 2016, p.26).

Intending to justify why Google, Appel an Amazon are on the top of the most innovative organizations Choudhary (2014) suggested four main criteria: happy and motivated employees, (ii) customer focus based on higher calling, (iii) leadership committed to innovation, and (iv) sense of urgency and fear in the workforce. The type of leadership/management that prevails meets the components that are described above, due to "*Leadership is viewed as a key determinant of organizational effectiveness*..." (Yukl, 1996, p.288).

1.2 Evolution of Leadership

In studying leadership and understanding how its conception developed across time, one should ask What is the prime goal of a leader? What is the leader's role in the organization?

Leaders have been highlighted in many contexts since ancient age as in Roman and Greek Empires. In those periods, the leader was someone with authority to make decisions alone without any contribution from the others that belong to that respective group. In that epoch, the clan concept was an ideology that every city-state implemented. For example, a family had a different meaning comparing to nowadays, because people was part of a family/clan even the leader was not their father. These group of persons were not seen as individuals but only as members of that organization. In contrast, currently, although in all societies there are groups of people, individuals are treated as so, empowered to make decisions, to criticize and contribute for themselves or for all society (Markham, 2012).

In the 5th century, with the fall of Roman Empire many of the established assumptions and cultural values changed many times up to the 15^{th} century, when the modern age started to gain shape. During this period, some systems changed from a clan typology to one with more individuality, with more rationality. At the same time, the religion spread around the world in different courses, for instance, Christianity evolved into a rationalized religion. Those events made emerge a more mature mindset that had consequences in social structures such as the leadership role (*cf.* Appendix A) (Markham, 2012).

Management and leadership concepts always have been present in organizational context, nevertheless only after 1900 have been scientifically investigated. In the inception of the 20th century, being a leader was interpreted as being an authoritarian person to whom one should obey, respect and be loyal. Afterwards leadership start to be interpreted as someone who influence his subordinates instead of dominating them and, at the same time, requiring the collaboration with the group and within each member (Northouse, 2013). This changing on leadership meaning marked a new direction in research, since several authors focused on other type of variables that could impact on leaders' performance (Bass, 1990). During the first 50 years, leaders were evaluated under their traits, what meant that a good leader must have a set of innate features, which encompassed 34 typical traits. Stogdill, Mann, Lewin,

Fleshman, Coons, and Likert are the most known authors that analyzed leadership from this point of view and defended that someone should be "special" to be a leader. If a person did not have those personality traits taken as essential to leadership, he or she would be incapable of performing this type of function (Bergamini, 1994).

Big changes were felt in market's dynamic as the need to improve the processes, the technology, the cultural values, the worldwide communication, the capacity to surpass political boundaries (Bird & Mendenhall, 2016). Meanwhile, in 1950 (Bird & Mendenhall, 2016) research start to look over organizational psychology and management behavior more deeply. According to Stogdill (1959 cf. Bass, 1990, p.13) leadership is "the process of influencing the activities of an organized group in its efforts toward goal setting and goal achievement". With this mindset, the term interaction easily appeared to define leadership, as Haiman (1951 cf. Bass, 1990, p.13) propose: "direct leadership is an interaction process in which an individual, usually through the medium of speech, influence the behaviour of others toward a particular end.". It was during this post war period, that another change in researchers' focus occurred: traits became less important. What matter was how leaders behave and how they act towards their groups. In this sense, leadership were classified based on leaders' behavior to achieved shared goals and the manner their acts could influence their subordinates. In other words, leadership effectiveness was dependent on team goals achievement. To understand better the linkage between leadership behaviors and efficiency, questionnaires were built to measure the relationship between those constructs (Northouse, 2013). By then, regarding leader's attitudes and behaviors, leadership was divided in styles as autocratic vs. democratic. The first one defines a person who, mainly, promote a high level of productivity and their relationship is strictly professional (Fiedler, 1967). The employees only must do what is required without any type of decision making, neither opportunity to suggest other ways of working to improve their productivity or performance. This kind of leadership is more vulnerable in creating resistance by collaborators (Baesu & Bejinaru, 2015). On the other hand, the second leadership style describe someone who encourage a high morale on collaborators and focus on products quality (Fiedler, 1967). The employees are integrated in all work processes and stimulated to express their opinions, with a final decision taken by the leader (Baesu & Bejinaru, 2015).

By 1970, behavioral theories were dominant (Yukl, 1996). Some authors underlined the importance of collaborators' behavior due their effect in leaders' performance (Northouse, 2013). These contingent variables were established under situational theories, *"It will, therefore, be very important to know whether the group environment will make it relatively*

easy or difficult for the leader to influence the members of his group" (Fiedler, 1967, 158). According to Fiedler Model there are three major components that influence leadership effectiveness: the personal relationship between the leader and group members; the legitimate power (rewards and sanctions, depending on, for instance, organizational culture) and the tasks planned to be performed by the team (how structured are them). Corresponding to situational approaches, anyone could be leader, just need to be trained to perform properly (or just changed the situation so to improve leadership effectiveness). This type of theories does not put apart the other perspectives, quite the opposite, the modern authors admit that some people have more predisposition than others to be leaders, nevertheless, the context where leaders act is crucial to determine their effectiveness (Bergamini, 1994).

Additionally, with globalization, research shifted focus to international leadership and management that involves international strategy, international human resources and every component that a business implies to remain in the business worldwide market. It is important to be aware of some factors that are inherent to globalization as interdependency, multiplicity, flux and complexity what require global leaders and managers. Independently of working in a small or big company, currently to be competitive organizations should "*Think global, act local*" (Bird & Mendenhall, 2016, p.123). Also, companies need to remain adapted by interpreting the environment as well as acquiring and use the right resources relating to technology and personal tools - competencies which accordingly to Roe (2002 *cf.* Roe, 2005, p. 83) is "*…an acquired ability to adequality perform a task, role or mission*". In other words, competencies are associated with employees knowlegde and behaviors which are learned at workplace and must comprise organizational goal achievement.

1.3 Transformational vs. Transactional Leadership

Since the late 1980s, a new focus on leadership research acknowledged emotions and values, charisma, vision and transformation, as opposed to "traditional" theories which accentuate their bases on rational processes (Avolio, Bass, & Jung, 1999). These reemerged emotion-based approaches, known by transformational and charismatic leadership theories, come up due to the importance of symbolical leaders' behaviors and consequences on successful employees' performance (Yukl, 1996). Those were, firstly, developed by Weber (1947 *cf.* Yukl, 1996) as charismatic theory "*...described how followers attribute extraordinary qualities (charisma) to the leader*" (Yukl, 1996, p.293). According with this author, other authors took up this line, namely as Conger and Kanungo (1987, 1998), House (1977), and Shamir, House, and Arthur (1993). They explored this line, creating alternative

versions, for instance, highlighting the leader, employees and situational characteristics as influence on this attribution of extraordinary qualities. In a general way, the most useful definition in literature seems to support the association of this qualities attribution with followers' identification level.

At the same time, Burns (1978 *cf.* Avolio, Bass, & Jung, 1999, p. 457) presented two new concepts namely transformation and transactional leadership and later its model "...*as a single continuum with the former at one end and the latter at the other*". Nevertheless, other investigators as Bass and colleagues (Bass, 1985, 1996 *cf.* Yukl, 1996), assumed the distinction of those constructs and suggest, firstly, seven leadership factors: charisma, inspirational, intellectual stimulation, individualized consideration, contingent reward, management-by-exception and laissez-faire. In the subsequent years, some changes happen, namely the incorporation of charisma and inspirational items into the same construct, due to inexistence of any empirically evidence of distinction between them. This six-factor model was, for the first time, tested on US Army, based on Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995), being constituted by five leadership factors - three transformational components and two transactional elements - and one passiveavoidant/laissez-faire factor. Additionally, Bass and colleagues (1985) found two higher-order factors which subdivided the management by exception into passive and active.

Many versions of MLQ were developed, being one of them the MLQ (Form 5X). Its purpose was to solve some complications, among which, item wording, discriminant validity and the inclusion of behaviors and attributes as different constructs. These ultimately topics were defined as Idealized influence, however remained separately because of their conceptualization on Charismatic-leadership theory (Avolio, Bass, & Jung, 1999). Indeed, transformational theory put into this approach the necessity of leaders with charisma. Accordingly, this component is essential for transformational leadership, nevertheless the reverse does not must occur. In sum, the term "transformational" is related to many types of effectiveness leadership and is anchored in "...*transformation of individual followers or to the transformation of entire organizations.*" idea (Yukl, 1996, p. 299).

In literature, transformational leadership is presented as a five components approach:

- *Intellectual Stimulation* encompasses the degree of challenge launched by the leader, stimulating the creativity in order to generate new ideas. Learning is also valued to make employees integrated in work process and decision making;
- Individualized Consideration focus leaders' concern about individuals' needs. Leaders can act as mentors who empower bilateral communications and guide

each follower according to organizational goals without ever forgetting the competencies and individual needs;

- *Inspirational Motivation* focus on leader's capacity to motivate employees in participating on his/her vision of the business. It concerns his/her success in inspiring followers to do what is believed to be the best to reach the targets;
- Idealized Influence is a component that presents two factors Attribute-Charisma and Behavior-Charisma which describes the importance of emotional elements on followers' performance: "The leader instills pride and feelings which increase the ability to perform of those who follow him..." (Baesu & Bejinaru, 2015, p. 141) and at the same time diffuses respect and trust.

One of the fundamentals of transformational leadership, mentioned among the above elements, is the balance of collaborators' values with organizational values, to achieve companies' goals. Meanwhile, the leader should be active in the development of collaborators' personal and professional interests as well as their needs and concerns (Hoogh, Hartog, & Koopman, 2005). These topics are inherent to leaders' emotional intelligence capacity, which can be translate in their ability to inspire through an emotional process. In literature this was found to be one of the most influential variables in employees' performance (Baesu & Bejinaru, 2015). In this sense, the leader should be someone who motivates and enthusiasm the subordinates, who empower some type of behaviors, for instance, capacity of autonomy thinking and creative ideas and charge responsibilities to their followers (Hoogh, Hartog, & Koopman, 2005), who inspire them to improve organizational performance, to make them (Clarke, 2013) "...feel trust, admiration, loyalty, and respect toward the leader." (Yukl, 1996, 286). Based on research, motivation was added as a critical element to obtain good results from employees, to maintain their satisfaction at workplace and to keep a favorable relationship between leader-subordinate (Northouse, 2013). In contrast with past, researchers want to understand how leaders motivate their followers and not how employees challenge leader's vision. These topics are central to understand how important are the leader's psychology mechanisms, due to his/her influence on people and the way they identify themselves. As more identical are both perspectives easier is to achieve the company goals and the performance required. The transformational leader has also an important contribution as a promoter of "...challenges assumptions, takes risks and encourages subordinates to be creative." (Clarke, 2013, p.23).

This concept can appear as a meaning of charismatic, depending on the point of view of the researchers. Regardless of approaches, in literature it is consensual that both constructs support the idea of leaders' role as a motivator and influencer of followers, in order to achieve more than what was delineated and expected.

Opposed to the previous view, there is another type of leadership which establishes more distant relationship between the leader and the collaborators: transactional leadership. Burns (1978) developed, first of all, a view of "transforming leadership" and later the transactional leadership first model (Bolden, Gosling, Marturano, & Dennison, 2003). Afterwards, Bass (1985) developed the transformational leadership concept and interpreted Burns' transactional approach as a complement of transformational leadership, but always emphasizing the active transactional leaders' role.

A leader delineates the tasks that are mandatory and clarifies which objectives should be attained and what must subordinates do to accomplish the leader's expectations. In other words, transactional theory is based in task-focused behaviors, which demands clarifications of expectancies, rules and procedures. This type of leadership can be subdivided in four leaderships' styles: contingent reward, management-by-exception active, management-byexception passive, and laissez-faire:

- *Contingent reward* describes an exchange agreement between leader and subordinates in so far as there is a clear goal expectation and a reward for those who achieved it;
- *Management-by-exception active* is present when the leader follows subordinates' behaviurs and has a corrective attitude before something wrong happen;
- *Management-by-exception passive* style is the opposite in the sense that the leader only has a corrective action once problems have occurred;
- And finally, leaders may opt not to have any of the previous approaches towards the team's if they adopt *laissez-faire style*. Leaders let their team work on their own, most of the times without any action (Baesu & Bejinaru, 2015). This component was added lately, being initially, taken as passive management by exception. Nevertheless, regarding some findings, it was included under the transactional theory (Yulk, 1996).

In short, "*Transformational leadership is differentiated from transactional leadership, which involves an exchange process to motivate follower compliance with leader requests and organization rules*" (Yukl, 1996, p. 286). In other words, transactional leadership defends the best productivity associated to employees' efforts and commitment to tasks and goals defined by the leader. On the other hand, transformational leaders guide themselves by the need to mobilize their followers to act fast and effectively, adapting their behavior and performance to

environmental demands. Additionally, the relevance of inspiring and motivating followers to be innovative and creative, to act beyond the boundaries and building a strong team where all individuals discuss all ideas, are some cornerstones of this approach (Yukl, 1996) (*cf.* Appendix B (Baesu & Bejinaru, 2015)).

In literature, some researchers interpreted those two leadership models as complementary (*cf.* Appendix C), others take them as opposed and even other studies assume that situational components are fulcrum to leaders' behavior. According to Bass (1985 *cf.* Yulk, 1996), and results obtained from his empirical studies in different organizations with distinct leadership level of authority and across the world, demonstrate that transformational and transactional leadership can work together (Yulk, 1996). Nevertheless, one can more easily be a transformational leadership in a dynamic organization (where the employees can be challenged, creative and innovative and, consequently, more competitive), than in a stable environment where the only challenge in to endure with the same *modus operandi* (Hoogh, Hartog, & Koopman, 2005). Nowadays, due to modern world dynamic and globalization, most of companies experience a turbulent environment, which renders transformational leadership an asset. Furthermore, according to Avolio, Bass and Jung (1999) research, there is significant evidence concerning transformational leadership effectiveness and its association with satisfaction, motivation and performance high levels. This discussion very much reenacts the traditional one on leadership versus management.

1.4 Leadership vs. Management

According to George Wealthersby (1999), former CEO of American Management Association, leadership and management differ: management is, mainly, organizational control, achievement of the results, setting of priorities. On the other hand, leadership remains a collaborative work process, which motivate employees to align themselves with leaders' point of view and, consequently, organizational values, practices and demands.

Amongst the first authors to tackle this issue, Jacob (1970 *cf.* Hickman, 1998) distinguished them by emphasizing authority and rationality as components related to management, as well as the idea of results expectation regarding on employees' role. Conversely, leadership implied participation of all employees and leaders' role encompass empowerment and incentive to such behaviors that bring benefits on medium/long term (Hickman, 1998). In other words, managers use the authority to achieve what they want from subordinates and leaders adopt other tools of influence to convince their followers to do what seems correct, not without discussing with them before any decision making.

Lunenburg (2011) support the previous view, stating that several managers are not leaders, despite of commonly assumed. For short, the author argues that both functions are critical in an organization, nevertheless their roles differ: leaders should instill change and new approaches, conversely to managers who rule themselves by stability. Moreover, leaders care about employees and their professional and personal well-being. On the other hand, managers are focused on goals achievement.

Burns (1978) also acknowledged the antagonism between management and leadership, and some authors, based in his definition of transactional leadership, matched those concepts to transactional and leadership constructs, respectively. For instance, Enochs (1981 *cf.* Hickman, 1998), reinterpreted Burns premise, as transactional leadership is competent but is "trade-off for survival". On the contrary, transformational leadership is more focused in fundamental changes within an atypical environment that requires more behavioral adaptation.

Despite of this view, authors like Mintzberg (2004) support the idea of management and leadership being complementary of each one, because a manager has to lead as a leader has to manage. According to this author, a manager is someone who has authority and status in an organization, and is in charge of many responsibilities, since the role comprises ten main tasks (*cf.* Appendix D). One of them is leading, which can be translated in motivating followers, encourage them to achieve goals and, at the same time, being concerned about individuals' needs, matching those with organizational needs (Mintzberg, 1989). More than this, management is interpreted by many people as a science but Mintzberg contends it is not despite of manager needs the knowledge from sciences researches and other sources. Nevertheless, the author assumes this discipline as an art, due to its insight, vision and intuition components required to be an efficient manager. It also greatly depends on context, however competent management should meet art, craft and science (Mintzberg & Gosling, 2002).

Based in this idea that management is not a theoretical discipline, Mintzberg researched about MBA structures and how managerial concepts are learnt. In MBA, the traditional education is still being in a classroom and based, chiefly in science, what makes students insufficiently capable to manage. To be efficient they need to develop their soft skills and it is not in a classroom that it will happen. Some MBA have soft skills workshop, but still it was theoretical. Students did not have the opportunity to internalize the competencies required to know how to deal with real organizational problems. Additionally, only with work experience would one be able to understand some concepts discussed in those courses and,

later, implement that knowledge, adapting their performance to organizational environment (Mintzberg, 2004). "Although managers cannot be created in a classroom, practicing managers can profoundly improve their capabilities there." (Mintzberg & Gosling, 2002, p. 65).

Regardless of Mintzberg approach, his definition of a manager is close to that of transformational leadership. Meaning, the importance of competencies such as dealing with unforeseen scenarios which require creative business strategies to remain in the market is very high. Manager's soft skills are the cornerstone of organizational success due to its influence on followers' performance (Mintzberg, 1989).

In a similar manner, Kotter (1990) studied the differences between management and leadership. His approach does not assume an opposition of those concepts. The author analyses it as distinctive ways of leading an organization, which sometimes can be complementary, depending on the type of entrepreneurship and its mission, culture and goals. According with Kotter's (1990) definition of management and leadership, both involve decision making, goal achievement and networks of people. However, these elements differ in many other topics, mostly, in their primary function: leadership is useful when an organization needs to change and management needs to cope with complexity. Kotter (1990) presents his description of Management and Leadership, comparing both notions, based in four main topics (*cf.* Table 1.4.1).

	Management	Leadership
Creating an agenda	Planning and budgeting: establishing detailed steps and timetables for achieving need results, then allocating the resources necessary to make it happen.	Establishing direction: developing a vision of the future – often the distant future – and strategies for producing the changes needed to achieve that vision.
Developing a human network for achieving the agenda	Organizing and Staffing: establishing some structure for accomplish plan requirements, staffing that structure with individuals, delegating	<u>Aligning People</u> : communicating the direction by words and deeds to all those whose cooperation may be needed so as to influence the creation of teams and

Table 1.4.1 – Management and Leadership Differences

	responsibility and authority for carrying out the plan, providing policies and procedures to help guide people, and creating methods or systems to monitor implementation.	coalitions that understand the vision and strategies, and accept their validity.
Execution	<u>Controlling and Problem Solving</u> : monitoring results vs plan in some details, identifying deviations, and then planning and organizing to solve these problems.	<u>Motivating and Inspiring</u> – energizing people to overcome major political, bureaucratic, and resource barriers to change by satisfying very basic, but often unfulfilled, human needs.
Outcomes	Produces a degree of predictability and order, and has the potential of consistently producing key results expected by various stakeholders.	Produces changes, often to a dramatic degree, and has the potential of producing extremely useful change (e.g., new products that customers want, new approaches to labor relations that help make a firm more competitive).

Source: Kotter (1990, p. 6)

Once again, admitting the previous view, management can be translated as transactional leadership while Kotter's description of leadership can be interpreted as transformational.

A recent overview regarding this distinction is shown below. This approach is supported by Bennis (2007, p.12) assuming that "*Managers do things right, while leaders do the right things*." In addition, the author sustains the idea that leaders are not managers and vice-versa.

Category	Leadership	Management
Thinking Process	Focuses on people Looks outward	 Focuses on things Looks inward
Goal Setting	Articulates a vision Creates the future Sees the forest	 Executes plans Improves the present Sees the trees
Employee Relations	Empowers Colleagues Trusts & develops	 Controls Subordinates Directs & coordinates
Operation	Does the right things Creates change Serves subordinates	 Does things right Manages change Serves superordinates
Governance	Uses influence Uses conflict Acts decisively	 Uses authority Avoids conflict Acts responsibly

Table 1.4.2 – Comparison between Leadership and Management (Lunenburg, 2011, p. 2)

Due to its distinction, companies will need leaders and not managers to lead. They need to instill creativity and innovation behaviors as well as preparation to deal with market complexity and dynamics. According to this point of view, transformational leaders comprise the right skills to deal with modern society demands (Bennis, 2007).

1.5 Leadership and Performative Arts

Leadership is present in numerous contexts and not only in business organizations. Leaders exist in any group whether formally or informally. For instance, in arts environment, the leaders, as in other circumstances, must guide followers, help them to develop their competencies to reach a better performance and to achieve the goals (Nastase, & Barbu, 2011). In arts' world leaders have a specific name, depending on artistic strand, for example, choreographer for dancers, conductor for musicians, director for actors. Those, namely by "Performing Arts" are translated as arts forms with the purpose of expressing and conveying emotions, through voices or movement, for a live audience (Borgonovi, 2004).

During the twenty-first century, arts have been recognized as benefitial to organizational development and performance as well as a contribution to leadership evolution: "...leadership of possibility, a leadership based more on hope, aspiration, and

innovation..." (Adler, 2006, p. 487). Some authors, such as Nancy Adler, Lotte Darso, Rob Austin and Lee Devin, have been investigating the benefits of arts' technique, processes, principles *etc.* in business context, as a trigger to enhance creativity and innovation levels.

According to Adler (2006 *cf.* Taylor & Ladkin, 2009, p. 56), five main components prevail which support this relationship: "(1) increasing global connectedness, (2) increasing domination of market forces, (3) an increasingly complex and chaotic environment, (4) decrease in the cost of experimentation, and (5) yearning for significance". In other words, everything is interconnected and the quick change that companies are passing through require new strategies based on revolutionary ideas. The oldest practices are no longer applicable on modern societies.

Additionally, the private sector is growing due to its power in maintaining a society reasonable and competitive. So, many public and governmental institutions and others with authority have been replaced by those privately held. This new global structure also requests people with specific soft skills who contribute to market evolution. Using creativity and innovation gives rise to different procedures and results. Artists have a crucial importance on this topic and as Professor Rob Austin (*cf.* Adler, 2006, p.487) stated "*The economy of the future will be about creating value and appropriate forms, and no one knows more about the processes for doing that than artists.*". In artworks creativity is more common than innovation, in the sense that artists are higher focused on creative ideas and further innovation appear. So, their target are the processes instead of profit raising or lowering costs. For instance, according to Bozic and Olsson (2013), choreographers pay more attention to what dancers learn and how they can find out other ways to work and possibilities to explore.

Furthermore, all choreographers interviewed mentioned that during this exploration periods, improvisation reveals itself a fundamental tool to conceive good and new ideas (*cf.* Appendix E). Improving can be translate in a way of thinking, acting and collaborating with each other as a strategy to remain creative. Using this tool, employees will be able to develop their risk-taking skills and then try out things that were never done before. In this sequence, new ideas will emerge and, if done in group, more knowledge and trust can be shared within group members, including leaders. Artists are more prepared to taking risks because of their type of working processes that is partially anchored in improvisation (Bozic & Olsson, 2013).

These components are extremely significant for an increasingly complex and chaotic environment, since it allows leaders and managers to respond to unpredictable threats and opportunities. Hence, organizations will fit better and adapt themselves into market demands. Supplementary, due to its business complexity, companies have been prone to implement flat

structures, establish network relationships and international strategies. Employees are no longer working as individuals but more as teams. Arts performances, once more, are taken as a benefit to organizations, for instance, dancers, actors and musicians develop collaborative competences on their work routines, which turns into an advantage "...to look to collaborative artists than to more traditional management models..." (Adler, 2006, p.491). Social interaction is a necessary condition to the development of knowledge and innovation, based on working processes such as exploration of communication, conscious and emotional components (Bozic & Olsson, 2013).

With technology advances, the experimental tests have been reduced. Basically, organizations should test hypothesis when intending to change something regarding structure, procedures etc. Nevertheless, those have being replaced for planning using technological tools, which causes the costs to decrease. In this point, companies should let employees to be creative and innovative, to the example of artistic people. It is no longer feasible to act as a mere operational officer. Moreover, social contributions are increasingly rare due to individuals' interests only in their own career. Working in a company is not exclusive to do the tasks delineated but also do something genuine that will help colleagues, suppliers and society. "...large parts of the population feel that business has become detached from society, that business interests are no longer aligned with societal interests " (Adler, 2006, p. 493). So, human being should contribute to communities as part of their social responsibility, in order to help societies to evolve. In this sense, the importance of performing artists' sensibility has already considered by leaders and managers as a positive influence on organizational efficacy: all artists working days are based on emotions development to be able to express better what they are feeling, thus more sensitive awareness is promoted (Taylor & Ladkin, 2009).

Following the topics above, the new century requires a leader's profile which encompasses creativity and courage to face the reality, to see unimaginable opportunities, to inspire followers. This last component is crucial to have employees on the same side and inspiring them to imagine other possibilities beyond what is obviously. More than ever, unpredictable episodes happen and companies must be prepared to lead with it, using individuals' competencies and knowledge as main resources Mintzberg (2004).

Knowledge work which is acquired with past experiences should be guided by innovation and new ideas, to employees have a better performance next time. In this sequence, Austin and Devin (2003) encourage managers to look for artists work structure instead of traditional procedures to add value on organizations performance. Based on this

idea, the authors developed an approach denominated by *Artful Making* which state, on the one hand, that should be considered the arts' principles and practice by all members' group, and on the other hand, it's necessary to "make" work based on materials combination with a final purpose. This approach is useful when a team wants to create something new or even doesn't know what objectives should define to achieve a good performance. The results are accomplished by ideas debates, knowledge shared and work collaboration between employees and leaders, because it's not enough to have all steps delineated. Improvisation and adaption into market demands, once again, is a significant tool to answer properly (Austin & Devin, 2003).

Several managers and leaders are starting to be aware that business work is "more art than science" and many companies and institutions have already incorporated in their culture arts' initiatives likewise arts-based methods. Those embrace artistic expression as dance, music *etc.* to promote new business working processes (Brenner, 2014). For instance, a very famous poet David Whyte was invited for numerous corporations to address their senior executives. Additionally, several business universities, for example, Babson College integrated in their MBA curriculum arts' classes to students' creativity enhancement as well as in Harvard School already exists Master in Fine Arts as a new business degree. Dance is also included as an art-based method in many leading business schools, being Dance Company Pilobolus one of the most recognized in this context. Its contribution intends to develop students' movement, improvisation and collaborative skills. Also 2004 World Economic Forum in Switzerland organized a workshop called "*If an Artist ran your Business*?". (Taylor & Ladkin, 2009). Those are just some illustrations of cross fertilization between arts and organizations and corroborate the prominence of arts-based method application.

According to literature review, this kind of method comprises four components which explain how performing arts can be an advantage to improve specific fields of managers and leaders' role: skills transfer, projective technique, illustration of essence and making art. Specifically, arts-based method develops some type of skills which can be transferred to a completely different area, for instance, theatre practice proves to be a way of developing doctors' empathy. Projective techniques are concerned about some type of artists' work procedures that enable them to express feelings more easily compared to conventional models (Bozic and Olsson, 2013). Due to its deeper and inner manner of working, arts-based methods also empower the comprehension of tacit knowledge, thus the essence of conceptions is more illustrative (Taylor & Ladkin, 2009). Lastly, making art instigate collaboration between

teams' members what in turn increase the connection with each other and so exists the opportunity to restructure their feelings. Consequently, more creativity processes arise as for example happens in some MBAs which have an academic curriculum that include arts classes to develop students' creativity skills. Similarly, Bozic and Olsson (2013), analysed a contemporary dance company as a system and verified that all artists integrated in that specific project, since musicians, directors and actors, belong to the same arrangement. Therefore, was not viable to study dancers' dynamic separately from musician, actors and other kind of artists. "*This network of actors thus collaborates through an iterative process that cannot be understood using linear laws*." (Bozic & Olsson, 2013, p. 66).

Arts-based methods intend to transform organizational procedures, in the sense of increasing and improve employees and teams' performance and consequently achieve better results. This transformation depends on several conditions and agents, being the leader a critical factor on this process. Additionally, due to human capital be one of the most recognized resource in the market of modern society, soft skills and knowledge reveal themselves one of the main tools. In this sense, leaders have the potential to influence followers on the development of arts capabilities, facilitating the acquisition of keycompetencies (Darso, 2013). That is, they have a crucial role in promotion the principles of arts-based methods, due to their responsibility on guiding their team and influence on each member of the group to achieve the performance desired. So, leaders must inspire and stimulate their group members, transforming its practices into another more adapted to societies' necessities. For example, choreographers are critical on dancers' creative process: *"The role of choreographer is in a way to create the right conditions for the creative flow to happen in the group and for different perspectives to meet, dialogue and merge. As a result, new ideas and strategies for living are born."* (Bozic & Olsson, 2013, p. 70).

In sum, arts-based methods have been implemented and incorporated in Management and Administration MBA and in other degrees as medical and pharmaceutical courses. As well as in organizational work processes, since "...*there is growing recognition that a more creative and innovative work and learning environment is necessary for organisations in the global economy*." (Darso, 2013, p. 16). Arts-based methods should be interpreted by companies and leaders, as a critical resource, as a strategic process of transformation. Without it, creativity and innovation levels will not rise what would make the business not enough good to remain competitive. Thus, organizations need hierarchical leaders which comprise a transformational profile to input artistic practices and instill a creative an innovative mindset.

1.6 Personality Theories: Big Five Model and RIASEC

In the sequence of transformational and transactional theories development, personality traits have been taking a central role in literature, due to its importance in predicting leadership behaviors and, consequently, leaders' effectiveness. Personality, despite of its interpretations' diversity, has a consensus definition in literature, known as individuals' behavior influenced by their stable characteristics (Mount, Barrick, Scullen, & Rounds, 2005).

Some researches, as for instance, Stogdill (1948) stated that situational variables impacted on leaders acting and, consequently, they effect on leadership style. However, there is evidence that there are some traits which are interpreted as part of a transformational leader profile (Hoogh, Hartog, & Koopman, 2005). Also, Judge, Bono, Ilies and Gerhardt (2002), discovered that traits explain 16% behavior variance, meaning that personality traits have substantial influence in leadership type. Additionally, according to Hoogh, Hartog, and Koopman (2005; p. 840) many studies have been confirming that "...positive and stronger results about transformational leadership in its association to perceptual and financial performance measures, compared to transactional leaders".

The Five-factor approach is one of the most recognized in personality theory. It proposes that the basic structure of personality organizes around five fundamental components: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience. Studies which based their methodology on this model have evidence of the stability and hereditary of those traits (Judge *et al*, 2002).

As regards leadership, many studies show incongruence regarding Extraversion, nevertheless, strong results were supported in leadership effectiveness in groups. This trait is positively associated to social leadership. Extrovert individuals seems more active, lively, restless, assertive and social (Judge *et al*, 2002). Agreeableness also appear positively associated to leadership effectiveness, due to its components such as trust, generosity, tact, altruism, and cooperation. When followers feel they are part of a work process and that they are trusted and considered, productivity is higher. Conscientiousness refers to leaders who are responsible, achievement orientated, persistent, who are concerned with rules established. In this point, studies also determined its positive relation to effective leaders (Hoogh, Hartog, & Koopman, 2005). Regarding Neuroticism, in Bass (1990 *cf.* Judge *et al*, 2002) and Hill and Ritchie (1977 *cf.* Judge *et al*, 2002) studies, self-esteem, a predictor of leadership was negatively associated with this trait. Finally, individuals that "...*are characterized by traits such as imagination, unconventionality, autonomy, creativity, and divergent thinking.*"

(McCrae & Costa, 1987 *cf.* Hoogh, Hartog, & Koopman, 2005, p. 844) have a high level of Openness, that is also positively associated to leadership effectiveness (Judge *et al*, 2002).

Several researches focus on the specific relation between transformational leadership and the Big Five Model. According to Judge and Bono (2000), neuroticism was negatively associated with this type of leadership, because self-esteem and self-confidence are essential to leaders' initiative and so it "...is unlikely that they will exhibit transformational leadership behaviours, such as idealized influence, inspirational motivation, or intellectual stimulation." (Bono and Judge, 2004, p. 902). Extraversion is strongly related to social leadership, as mentioned before, and this trait can be linked to transformational leaders' profile. Also, the emotional component, one of the most important in transformational theory, is inherent to Extraversion trait. Regarding Openness to experience, as Conger and Kanungo (1987, p. 643) wrote, "... charismatic leaders are not group facilitators like consensual leaders, but they are active innovators ... their ... behaviours must be novel, unconventional, and out of the ordinary". The same is valid for Agreeableness trait, meaning that there is evidence of a positive association with transformational leadership, due to the generosity and concern for the others. According to Bass (1985 cf. Judge and Bono, 2000), conscientiousness is part of transformational leader personality, though Avolio et al. (1996, cf. Judge and Bono, 2000), found low scores for this personality trait in transformational leaders.

Literature review suggests that leadership is closer to transformational leadership and management to transactional leadership. Regarding Big Five Theory, transformational leaders are expected to show higher levels of Extraversion, due to their social, assertiveness and influence components, as well as "openness to experience" that comprehends innovation and creativity, elements expected to be instilled by this kind of leaders (Judge & Bono, 2000). Based on this idea, transactional leaders who are more authoritarian and rational as managers, should have lower scores of Extraversion and Openness to experience compared to transformational leaders. According to Judge and Bono (2004), the matching between Five Factor model is still a bit inconsistent perhaps due to situational variables. Nonetheless, their meta-analysis confirmed that Extraversion has the strongest score in transformational leadership. This trait is also positively related to transactional leadership, although at a lower level. Furthermore, openness to experience has a higher correlation with transformational than transactional leadership (Judge & Bono, 2004). In sum, matching Big Five theory with leadership and management, suggests that leaders are more social, emotional and influential than managers, as well as more creative, innovative and motivated to embrace new challenges (Hoogh, Hartog, & Koopman, 2005).

RIASEC model created by Holland (1959 *cf.* Armstrong, Day, McVay, & Rounds, 2008) is highly regarded in literature. It is another approach which focuses on individual characteristics and its similarities with workplace. This theory is based on a structure of interests, analyzing individual features and their matching to a specific function and environment, allowing to interpret the differences between each person personality, as well as their suitability.

An accurate description of work functions reveals a high importance to a variety of areas such as "...labour economics, manpower planning, occupational forecasting, job analysis, compensation and career guidance." (McDaniel & Snell, 1999, p.74). These disciplines need data sources to have the essential information to be able to achieve their goals, otherwise they do not have a base to guide themselves and make correct decisions. In this sense, various sources have been developed, primarily by books, as the well-known Dictionary of Occupational Titles (DOT). Due to technology improvement, have been needed to adapt the data bases information to the new job-related functions that the market is looking for. Consequently, novel systems were created from the use of computer, in order to store more information and to facilitate the research. DOT was replaced by a computerized source system named O*Net that englobe more and updated occupational information: "Congruence exists to the extent that a person matches his or her job in terms of some predefined characteristics." (McDaniel & Snell, 1999, p.75). Consistent with this trend, various models were incorporating in those systems and RIASEC taxonomy has been chosen to feed O*Net data base, mainly, to career information delivery (McDaniel & Snell, 1999).

Concretely, Holland approach (1959 *cf.* Armstrong, *et al.*, 2008), defined six types of personality/interests: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C). Additionally, "*Personality is described in terms of preferences for work activities, and work environments are described in terms of the people who work there and the activities they perform.*" (Armstrong, *et al.*, 2008, p. 2). This matching between individuals' personality and workplace environment choice is the cornerstone of this theory and is a premise to have an efficient performance. According to Holland (1997 *cf.* McDaniel and Snell, 1999, p.74), an "…*appropriate vocational choices are a function of a successful match between an individual's vocational personality (e.g., Social) and the work environment (<i>e.g., high interpersonal contact*)."

Although personality traits and interests are distinct concepts in psychology, a link among Big Five Model and Holland Interests prevail, because "...*dispositional attributes influence behaviour through motivational processes*." (Mount *et al.*, 2005, p. 447). According

to Armstrong, *et al.* (2008) several meta-analyses found a strong correlation between Extraversion from Five-factor view and S and E components. Furthermore, Openness to experience had a strong association to A and I types. Those two relations are stronger compared to the other elements. However, there is also evidence of association between Agreeableness and S type, Conscientiousness and C type and a negative correlation between Neuroticism and E type (Armstrong, *et al.*, 2008).

Both in Big Five and in RIASEC models, the results reveal the same regarding transformational leadership profile: Extraversion and "Openness to experience" show the higher levels of all personality traits, as well as the interests associated with those - Social and Enterprising, Artistic and Investigative types, respectively. This means that a leader who performs based in transformational principles should be active, social, take risks, inspiring, innovative and creative, and ought to encourage the followers to be autonomous and collaborative with working processes.

On this research we discussed the difference between leadership and management regarding their style of leading. This means there should be a descriptor of competences to be an efficient transformational leader. O*Net on-line system (O*Net, 2017) answers this need by showing occupational descriptions comprehending knowledge, skills, abilities *etc*. for many occupations. It also includes an occupation that is of interest for this study: choreographer, which we believe may offer a reliable representative of performing arts' leaders:

Tasks:

• Direct rehearsals to instruct dancers in how to use dance steps, and in techniques to achieve desired effects.

• Read and study story lines and musical scores to determine how to translate ideas and moods into dance movements.

• Design dances for individual dancers, dance companies, musical theatre, opera, fashion shows, film, television productions, and special events, and for dancers ranging from beginners to professionals.

• Choose the music, sound effects, or spoken narrative to accompany a dance.

• Advise dancers on how to stand and move properly, teaching correct dance techniques to help prevent injuries.

Interests:

• Artistic — Artistic occupations frequently involve working with forms, designs and patterns. They often require self-expression and the work can be done without following a clear set of rules.

• Social — Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.

• Enterprising — Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.

Likewise, O*Net includes a profile for Chief-executive/Manager function (O*Net, 2017) as follows:

Tasks:

• Direct or coordinate an organization's financial or budget activities to fund operations, maximize investments, or increase efficiency.

• Appoint department heads or managers and assign or delegate responsibilities to them.

• Analyze operations to evaluate performance of a company or its staff in meeting objectives or to determine areas of potential cost reduction, program improvement, or policy change.

• Direct, plan, or implement policies, objectives, or activities of organizations or businesses to ensure continuing operations, to maximize returns on investments, or to increase productivity.

• Prepare budgets for approval, including those for funding or implementation of programs.

Interests:

• Enterprising — Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.

• Conventional — Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.

This decision concerns comparison of Managers and Artistic Leaders to prove that individuals with transformational leadership profile have a Choreographer O*Net profile. Consequently, it would be possible to conclude how arts-based methods offers an advantage to develop innovation and creativity skills, since they are recognized as key-competences to remain competitive in market (Adler, 2006).

1.7 Hypotheses

The cornerstone of the present study is the expectation that choreographers interest profile is closer to the requirements of a transformational leadership.

In this sequence, its corollary is the expectable higher score on transformational leadership dimensions (idealized influence – attribute, idealized influence – behavior, inspirational motivation, intellectual stimulation, individualized consideration) on choreographers as compared with managers. Accordingly, we hypothesize that:

Hypothesis 1: Managers rank lower than Performing Artists on transformational leadership:

H1a: Managers rank lower than Performing Artists on idealized influence – attribute.

H1b: Managers rank lower than Performing Artists on idealized influence – behavior.

H1c: Managers rank lower than Performing Artists on inspirational motivation.

H1d: Managers rank lower than Performing Artists on intellectual stimulation.

H1e: Managers rank lower than Performing Artists on individualized consideration.

Likewise, it is reasonable to expect higher transactional leadership scored on managers on contingent reward, although not necessarily in management by exception (both active and passive) or on laissez-faire. Accordingly, we hypothesize that:

Hypothesis 2: Managers rank higher than Performing Artists on transactional leadership:

H2a: Managers rank higher than Performing Artists on contingent reward.

H2b: Managers rank the same of Performing Artists on management by exception (Passive).

H2c: Managers rank the same of Performing Artists on management by exception (Active).

H2d: Managers rank the same of Performing Artists on Laissez-faire.

A logical consequence with theoretical relevance from the research problem establishes an assumed relationship between leadership styles and professional interests. A fundamental condition to move on with the empirical test lies in verifying to which extent O*Net professional interest profiles match those of the sample. Top remind, managers ranked high on Enterprising, Conventional while Choreographers ranked high on Enterprising, Artistic, and Social. Therefore, we hypothesize:

Hypothesis 3: <u>Performing Artists rank higher than Managers on RIASEC profile interests -</u> <u>Artist, Social and Enterprising</u>:

H3a: Managers rank the same of Performing Artists on Realistic.

H3b: Managers rank the same of Performing Artists on Investigative.

H3c: Managers rank lower than Performing Artists on Artistic.

H3d: Managers rank lower than Performing Artists on Social.

H3e: Managers rank the same of Performing Artists on Enterprising.

H3f: Managers rank higher than Performing Artists on Conventional.

Hypothesis 4: <u>Performing Artists that rank high on transformational leadership present a</u> <u>specific RIASEC interest-profile: Artistic, Social and Enterprising (Choreographer's RIASEC profile):</u>

H4a: In Performing Artists group, Realistic is positively associated with Transformational leadership.

H4b: In Performing Artists group, Investigative is not associated with Transformational leadership.

H4c: In Performing Artists group, Artistic is positively associated with Transformational leadership.

H4d: In Performing Artists group, Social is positively associated with Transformational leadership.

H4e: In Performing Artists group, Enterprising is positively associated with Transformational leadership.

H4f: In Performing Artists group, Conventional is not associated with Transformational leadership.

Hypothesis 5: <u>Managers that rank high on transformational leadership, present positive</u> association to a specific RIASEC interest-profile: Artistic, Social and Enterprising:

H5a: In Managers group, Realistic is positively associated with Transformational leadership.

H5b: In Managers group, Investigative is not associated with Transformational leadership.

H5c: In Managers group, Artistic is positively associated with Transformational leadership.

H5d: In Managers group, Social is positively associated with Transformational leadership.

H5e: In Managers group, Enterprising is positively associated with Transformational leadership.

H5f: In Managers group, Conventional is not associated with Transformational leadership.

If findings support hypotheses, we may assume the external validity of ensuing findings to the universe featured by O*Net. Otherwise we must caution against wrong rationale, insufficient research or sample idiosyncrasies.

1.8 Study Design

Figure 1: Compare means – Hypotheses 1 and 2

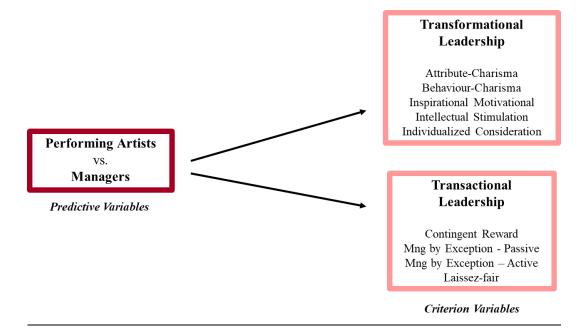
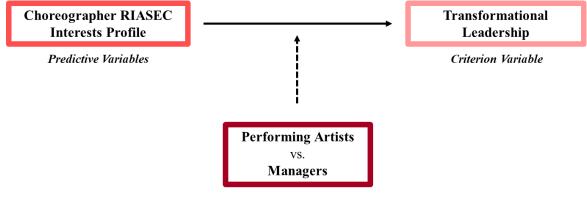


Figure 2: Compare means – Hypothesis 3



Figure 3: Regression – Hypotheses 4 and 5



Moderator Variable

Chapter II – Methodology

2.1. Data analysis strategy

Data analysis proceeds in a two-step fashion, firstly, by testing psychometric quality of measures and then by testing hypothesis. For psychometric testing purposes, we conduct factorial analysis which is acceptable as long as the following criteria are met: a) KMO above .500; Bartlett's test of sphericity with a significant *p-value* (p<.05); all communalities above .500; explained variance after rotation of at least 60%. In cases where orthogonal rotation applies, we expect not to find crossloadings. Crossloading is identified whenever a given item loads .30 in another factor than its own (or that distances more than .20). Items that fail to meet these criteria, cumulatively, are excluded from analysis. Additionally, factors are required to be reliable. Cronbach's alpha of .70 or above will be judged as showing sufficient reliability (Nunnally, 1975). However, as this author himself stated, when the scales are novel or being tested with an atypical sample (or a new population) and there are motives to believe they are still exploratory, one can use the .60 threshold as acceptable reliability.

As hypotheses are written in a comparative manner (group x differs from group y), we use *One-way* ANOVA to compare means between the creativity-based group and analytic-based group. Then, to confirm if exists any kind of correlation between RIASEC profile and transformational leadership, on each group, we apply regression analysis meeting all required assumptions to verify the significance of respective teste (p<0.05 to reject H₀ which states that doesn't exist any relationship between variables).

2.2. Sample

The current study presents a sample of 117 individuals, among which 74 are female (63,2%) and 43 respondents are male (36,8). Its age average it's 25 years old.

Following the investigation purpose, exist two different sample groups to be possible the comparison analysis of values obtained in each criterion variables, considering: people that are studying or is recently graduated with an analytics-based background, as for instance, economics, finance, management. On the other hand, individuals which academic courses is related to performing arts as dance, music, theater, *etc.*. In this sense, 59 respondents belong to Creativity-based group and 58 participants are included on Analytic-based group.

The sample were chosen following snowball and convenience methods. This decision was based on particularly characteristics needed for this investigation, not being used a random procedure. Moreover, the survey was answered by volunteers, that were available to participate on this study (Marôco, 2010).

Table 2.2.1 – Sample description

			Sex		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Female	74	63,2	63,2	63,2
	Male	43	36,8	36,8	100,0
	Total	117	100,0	100,0	

Table 2.2.2 – Sample description regarding Academic Background

Count				
		All_Co		
	_	Creativity_Based_Courses	Analytic_Based_Courses	Total
Sex	Female	38	36	74
	Male	21	22	43
Total		59	58	117

Sex * All_Courses Crosstabulation

2.3. Procedure

The current study draws on hypothetical-deductive scientific method. It main objective is to prove the relationship between transformational leadership style and Artistic, Social and Enterprising variables that define Choreographer RIASEC interest profile. Its association allow us to conclude that skills developed in Performing Arts Courses reveals a benefit to increase leaders' performance according to market demands.

After a review literature regarding leadership measurement and its association to competencies profiles, were chosen two measures: one denominated by Multifactor Leadership Questionnaire (MLQ 5X) (Avolio, Bass, & Jung, 1999) with the purpose of analyzing transformational and transactional leadership scores obtained in each group. The

original measure should be answered by people that is working for a long time and could answer about their leaders' behavior (Muenjohn & Armstrong, 2008). Nevertheless, trying to readjust the questions, all items, from first part, are focused in teamwork without differentiate who is studying and who is working. Specifically, in companies, for instance, exist official leaders what doesn't happen, in the same way, at university. In this context, naturally each member has a role in the group and one of them should be the leader to coordinate all inherent tasks, perhaps it's not assumed. In this sense, this questionnaire was translated and adapted for people who is continue studying and respondents that has already finished their academic training: these items focus teamwork in Universities or at workplaces, without discrimination. In other words, it's not asked directly about leadership, but to try to include an embracing sample, all questions were adapted to be answered regarding students' teamwork or based on workplace team group.

The other instrument namely by O*Net RIASEC interest profile survey intends to show what kind of leadership of Creativity-based group and Analytic-based group belong and their RIASEC profile on each condition. It was only translated to Portuguese, being that anything else was modified.

Both were included in the same survey, which was applied on-line, by *Qualtrics Platform*, allowing the respondents to answer from a link sent.

Data based was analyzed following the hypotheses defined earlier, being in detail the measures used as well as the reporting of results, below.

2.4. Measures

The theory proposed by Burns (1978 *cf.* Rowold, 2005) focus transformational and transactional leadership. Based on this approach, Bass and colleagues (*cf.* Muenjohn & Armstrong, 2008) created an instrument called Multifactor Leadership Questionnaire (MLQ) to measure several characteristics of transformational and transactional leadership, being one of the most recognized in literature. It has been developed during the last years emerging various versions. In addition, was validated to many cultures and languages. Bass and Avolio (Avolio, Bass and Jung, 1999), after numerous applications changed the original version, ending with MLQ (5X) form.

This short-form version contains 45 items that define the two styles of leadership. Transformational Leadership includes 5 factors: Idealized influence (attributes – charisma), Idealized influence (behavior – charisma), Inspirational motivation, Intellectual stimulation and Individual consideration. Transactional Leadership is composed by 4 factors: Contingent reward, Management by exception Active, Management by exception Passive and Laissez faire (Bass and Avolio, 2004). Each variable above comprises 4 items to have enough consistence and to be possible the measurement of constructs that defined the both leadership styles. MLQ use a frequency scale of 5 points: 0- "Not at all", 1- "Once in a while", 2- "Sometimes", 3-"Fairly often" and 4- "Frequently, if not always" (Avolio, Bass and Jung, 1999).

In the current study, MLQ (5X) survey has 36 items (were taken 9 items - 37 until 45) (*cf.* Appendix F), because that section focuses leadership outcomes, which doesn't make sense to the sample whom questionnaire was applied (Alsayed, Motaghi, Osman, 2012). Moreover, in order to validate the consistency of all factors and because the survey was applied to a new sample, was conducted a Factorial Analysis:

Transformational leadership comprehends 5 dimensions as mentioned above. Exploratory factor analysis showed a solution that failed to meet several criteria, as stated in the data analysis strategy section. Accordingly, we excluded all items in this situation and found a valid 3-factor solution (KMO=.765, Bartlett's χ^2 =338.738, 45, p<.001) explaining 63.7% variance after rotation (varimax). Table 2.4.1 shows the rotated solution and reliability figures.

Rotated Component Matrix ^a - Tranfo	ormational Lead	ership	
		Component	
	Inspirational	Idealized	Intelectual
	Motivation	Influence (B-C)	Stimulation
TR_Inspir3- Articulates a compelling vision of the future.	,887	,184	-,012
TR_Inspir1- Talks optimistically about the future.	,821	-,033	,128
TR_Inspir2- Talks enthusiastically about what needs to be	,693	,178	,317
accomplished.			
TR_AC4- I convey to the group an image of capacity and trust.	,664	,294	,148
TR_BC4- Emphasizes the importance of having a collective	,144	,872	,033
sense of mission.			
TR_BC3- Considers the moral and ethical consequences of	,062	,703	,160
decisions.			
TR_BC2- Specifies the importance of having a strong sense of	,222	,695	,216
purpose.			

Table 2.4.1 – Principal Components Analysis - Transformational Leadership

problems. Cronbach Alpha	.809	.707	.607
TR_IStim2- Seeks differing perspectives when solving	,259	,298	,593
TR_IStim4- Suggests new ways of looking at how to complete assignments.	,195	,334	,599
beliefs.			
TR_BC1- Talks about his/her most important values and	,026	-,034	,889

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Transactional leadership comprehends 4 dimensions, as previously stated, covering 4 items each. Exploratory factor analysis showed a solution that failed to meet several criteria, as stated in the data analysis strategy section. Accordingly, we excluded all items in this situation and found a valid 4-factor solution (KMO=.701, Bartlett's χ^2 =322.803, 66, p<.001) explaining 65% variance after rotation (varimax). In Appendix G is shown the rotated solution and reliability figures. Nevertheless, as the last factor fails to meet Cronbach's alpha threshold, we will disregard it in ensuing data analyses and redo the factorial analysis without it. The revised factorial analysis remains valid (KMO=.691, Bartlett's χ^2 =255.225, 36, p<.001) explaining 67% variance after rotation (varimax). Table 2.4.2 shows the rotated solution and reliability figures.

Rotated Component Matrix ^a - Tra	ansactional Leader	ship	
		Component	
	Mgm by Excep	Laissez-	Mgm by Excep
	Active	Faire	Passive
TS_Act_mbe2- Concentrates his/her full attention on dealing	,801	,147	-,133
with mistakes, complaints, and failures			
TS_Act_mbe3- Keeps track of all mistakes.	,884	-,059	,032
TS_Act_mbe4- Directs my attention toward failures to meet	,761	,020	,246
standards.			
TS_Laissez1- Avoids getting involved when important issues	,036	,852	-,059
arise.			
TS_Laissez2- Is absent when needed.	,079	,832	,093
TS_Pas_mbe2- Waits for things to go wrong before taking	,046	,642	,409
action.			

Table 2.4.2 – Principal Components Analysis – Transactional Leadership (revised)

Cronbach Alpha	.696	.762	.629
serious.			
TS_Pas_mbe1- Fails to interfere until problems become	-,259	,476	,552
repeated in the group.			
TS_Pas_mbe 4- Only overcome when the problems are being	,027	,117	,785
TS_Laissez3- Avoids making decisions.	,163	,002	,807

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Professional Interests, the second part of questionnaire, was measured with O*Net interest profiler (O*Net, 2017), that is a computerized occupational information source. This system is based on RIASEC, Holland's theory (1959 *cf.* Armstrong, *et al.*, 2008), which was the first interest model used to occupational descriptions and respective interests, skills, *etc.* Holland's approach (McDaniel & Snell, 1999) comprises six types of interests: Realistic, Investigative, Artistic, Social, Enterprising and Conventional.

O*Net survey contains 60 items, 10 items to measure each type of interest, e.g. Realistic (R, e.g. "Build kitchen cabinets"), Investigative (I, e.g. "Develop a new medicine"), Artistic (A, e.g. "Write books or plays"), Social (S, e.g. "Teach an individual an exercise routine"), Enterprising (E, e.g. "Manage a retail store"), and Conventional (C, e.g. "Proofread records or forms"). Respondents are requested to answer on a 5-point Likert scale from 1=Strongly Dislike to 5=Strongly Like.

Was conducted a PCA, which on the first exploratory factorial analysis showed a 6factor solution that comprehended some factors with single identity and other with mixed items. From analyzing the factor loadings and factor composition we opted to preserve all items that loaded above .60. The revised factorial analysis kept six factor with valid indicators (KMO= .766, Bartlett's χ^2 (465)= 1988.744, p<.001) explaining 68% variance after rotation (varimax). Table 2.4.3 shows the Principal Components obtained on O*Net Interest Profile survey.

Table 2.4.3 – Principal Components Analysis – RIASEC

Rotated Component Matrix^a

		Component				
	Conv.	Soc.	Entrep.	Invest.	Art.	Real.
C8-Stam, sort, and distribute mail for an organization.	,863	,108	,062	,138	,008	-,028
C2-Proofread records and forms.	,802	,129	,020	-,016	-,021	,103
C7-Keep inventory records.	,784	,112	,143	,124	-,082	,104
C5-Keep shipping and receive records.	,781	,064	,280	,048	-,064	,078
C10-Report rent payments.	,765	-,001	,379	,016	-,010	-,022
C9-Inventory supplies using a hand-held computer.	,744	-,045	,379	,099	-,077	,068
C6-Calculate the wages of employees.	,716	-,043	,363	-,004	-,007	,004
S10- Help conduct a group therapy session.	,123	,835	,098	,007	,207	,068
S2-Help people with personal or emotional problems.	-,018	,815	,134	,071	-,017	-,104
S4-Perform rehabilitation therapy.	-,032	,800	-,075	,150	,172	,084
S9- Teach sign language to people with hearing disabilities.	-,010	,783	,040	,052	,161	,073
S3-Give career guidance to people.	,299	,665	-,133	-,009	,076	-,026
E6-Negotiate business contracts.	,278	-,059	,805	,055	-,142	,129
E9-Represent a client in a lawsuit.	,287	,159	,753	,155	,027	-,036
E4-Manage a department within a large company.	,301	-,059	,707	,267	-,051	-,103
E1-Buy and sell stocks and bonds.	,356	-,249	,656	,157	-,062	,078
E10-Market a new line of clothing.	,218	,337	,642	,024	-,021	,078
I10-Work in a biology lab.	,145	,063	-,055	,838	,071	,094
I5-Examine blood samples using a microscope.	,129	,080,	,158	,802	,055	,073
18-Do laboratory tests to identify diseases.	-,045	,180	,281	,752	,087	-,048
I3-Conduct chemical experiments.	,090	-,120	,195	,740	,129	,277
I4-Study the movement of planets.	,015	,080,	,003	,673	,153	,301
A1-Write books or plays.	-,004	,098	-,091	-,016	,842	,008
A3-Compose or arrange music.	-,177	,121	-,070	,229	,767	,088
A2-Play a musical instrument.	-,242	,141	-,053	,250	,745	-,031
A9-Write scripts for movies or television shows.	,134	,105	,255	,043	,710	,125
A4-Draw pictures.	,022	,149	-,266	,034	,672	,216
R2-Lay brick or tile.	-,046	,155	-,061	,039	,112	,811
R5-Assemble electronic parts.	,119	-,113	,126	,284	,010	,802
R3-Repair household appliances.	,069	-,234	,116	,261	,026	,789
R1-Build kitchen cabinets.	,123	,232	-,037	,049	,185	,720
Cronbach's alpha	.919	.859	.856	.823	.863	.829

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Ultimately, *Education group* was measured with a dummy variable where individuals with expertise background on Performing Arts were coded with "1" and those with background expertise on Analytic-based Courses coded with "2".

Chapter III – Results

Factorial Analysis is the first step on this data base analysis to verify which items can be aggregate into the same factor and their consistency using Cronbach Alpha. This method is applied on both measures. On MLQ survey is found a 3-factor solution to transformational leadership (KMO=.765, Bartlett's χ^2 =338.738, 45, p<.001) explaining 63.7% variance after rotation (varimax): Inspirational Motivation (α = .809), Idealized influence – Behaviorcharisma- (α = .707) and Intellectual Stimulation (α = .607). On transactional leadership, the same number of criterion variable are defined (KMO=.691, Bartlett's χ^2 =255.225, 36, p<.001) explaining 67% variance after rotation (varimax): Management by Exception Active (α = .696), Laissez-fair (α =.762) and Management by Exception Passive (α = 629).

Based on factors generated by PCA, we analyzed the means' differences between Creativity-based group and Analytic-based, considering transformational leadership factors separately from transactional leadership factors.

ANOVA analysis shown below, prove that *F* test of each criterion variable that define transformational leadership have a level of significance above .05. This illustrate that groups' means are not statistically different as expected on Hypotheses 1. In this sense, it's not corroborate that participants with analytic background ranked lower on Inspirational Motivation (F= .426, p= .515), on Idealized Influence (B-C) (F= .450, p= .504) and on Intellectual Stimulation (F= 1.308, p= .255).

		ANOVA				
	-	Sum of			_	
		Squares	df	Mean Square	F	Sig.
Inspirational_Motivation	Between Groups	,199	1	,199	,426	,515
	Within Groups	53,757	115	,467		
	Total	53,956	116			
Idealized_Influence_	Between Groups	,232	1	,232	,450	,504
Behavioral_C	Within Groups	59,426	115	,517		
	Total	59,658	116			
Intellectual_Stimulation	Between Groups	,567	1	,567	1,308	,255
	Within Groups	49,837	115	,433		
	Total	50,404	116			
*p<.05						

Table 3.1. – ANOVA - Transformational Leadership: Comparison of means between groups

40

The same procedure was done regarding participants' answers on transactional leadership factors. Therefore, is used a ANOVA and according to Table 3.2 it's possible to verify that any *F* test is considerable significant (*p-value*>.05), what allow us to conclude that doesn't exist any difference between Laissez-fair level (F= 1.169, p= .282) of Creativity-based respondents and Analytic-based respondents. The same results are obtained on the other two variables – in Management by Exception Active (F= .403, p= .527) and Passive (F= .502, p= .480) are not found significant differences.

In sum, hypotheses H2b, H2c and H2d are corroborated, demonstrating that the answers related to criterion variables of transactional leadership are not depending on groups background– Creativity-based courses *vs*. Analytic-based courses.

Table 3.2. – ANOVA - Transactional Leadership: Comparison of means between groups

		ANOVA				
		Sum of				
	-	Squares	df	Mean Square	F	Sig.
Laissez_Faire	Between Groups	,571	1	,571	1,169	,282
	Within Groups	56,222	115	,489		
	Total	56,794	116			
Mgm_By_Exception_	Between Groups	,268	1	,268	,403	,527
Active	Within Groups	71,145	107	,665		
	Total	71,413	108			
Mgm_By_Exception_	Between Groups	,289	1	,289	,502	,480
Passive	Within Groups	66,265	115	,576		
	Total	66,555	116			
*n< 05						

*p<.05

Principal Component Analysis is also applied on RIASEC interests, in order to understand how each item behaviors within each category. As mentioned before, some topics were eliminated due to their low communalities. In this sense, even without some items, remain a 6-factor solution (KMO= .766, Bartlett's χ^2 (465)=1988.744, p<.001) explaining 68% variance after rotation (varimax), remaining the following variables: Realistic (α = .829), Investigative (α = .823), Artistic (α = .863), Social (α = .859), Enterprising (α = .856) and Conventional (α =.919).

According to Hypotheses 3, were obtained the means difference, through ANOVA analysis, of each group on each RIASEC factor and their respective significance level. All assumptions were validated, included multicollinearity criteria that assumed VIF values lower than 5 and Tolerance values nearly 1 (*cf.* Table 3.3). This principle ensures the absence of correlation between criterion variables.

Coefficients ^a									
			_		Standardize		_		
			Unsta	ndardized	d			Colline	arity
			Coe	fficients	Coefficients		-	Statis	lics
								Toleranc	
All_Courses	Mo	del	В	Std. Error	Beta	t	Sig.	е	VIF
Creativity-	1	(Constant)	3,121	,423		7,381	,000		
based Courses		Conventional	,023	,099	,043	,230	,819	,506	1,977
		Social	-,031	,076	-,061	-,404	,688	,783	1,277
		Artistic	,248	,110	,377	2,248	,029	,639	1,564
		Entrepreneur	,034	,082	,078	,412	,683	,506	1,978
		Investigative	-,155	,077	-,373	-2,026	,048	,531	1,883
		Realistic	,081	,063	,210	1,292	,203	,684	1,462
Analytic-based	1	(Constant)	2,329	,410		5,678	,000		
Courses		Conventional	-,082	,086	-,146	-,962	,341	,645	1,550
		Social	,163	,077	,291	2,123	,039	,791	1,264
		Artistic	,182	,078	,317	2,336	,024	,805	1,243
		Enterprising	,194	,081	,361	2,398	,021	,654	1,529
		Investigative	-,015	,079	-,026	-,190	,851	,818	1,222
		Realistic	-,077	,083	-,123	-,935	,355	,857	1,166

Table 3.3. – ANOVA - Validation of Multicollinearity assumption

a. Dependent Variable: TransfLeadership

Realistic (F=.352, p=.566), Investigative (F=.323, p=.571), Social (F=2.004, p=.160) and Conventional (F=1.702, p=.195) present an unacceptable *p*-value (above .05), hence we are not able to corroborate Hypothesis H3a, H3b, H3d, H3e, H3f.

Contrary to previous results, Artistic (F=8.621, p=.004) and Enterprising (F=13.074, p<.001) factors demonstrate a significant difference between Creativity-based group and Analytic-based group means.

		ANOVA										
		Sum of Squares	df	Mean Square	F	Sig.						
Realistic	Between Groups	,352	1	,352	,331	,566						
	Within Groups	112,829	106	1,064								
	Total	113,181	107									
Investigative	Between Groups	,339	1	,339	,323	,571						
	Within Groups	111,072	106	1,048								
	Total	111,411	107									
Artist	Between Groups	6,519	1	6,519	8,621	,004**						
	Within Groups	80,151	106	,756								
	Total	86,670	107									
Social	Between Groups	1,867	1	1,867	2,004	,160						
	Within Groups	98,738	106	,931								
	Total	100,605	107									
Enterprising	Between Groups	14,374	1	14,374	13,074	,000***						
	Within Groups	116,536	106	1,099								
	Total	130,910	107									
Conventional	Between Groups	1,524	1	1,524	1,702	,195						
	Within Groups	94,920	106	,895								
	Total	96,444	107									

*p<.05; p<.01**, p<.001***

In other words, this analysis proves that exists a clear difference between the means of groups regarding Artistic and Enterprising interests. Specifically, participants that belong to Creativity-based sample present a higher average concerning Artistic factor (Creativity-based Courses M=3.99, SD=.08; Analytic-based Courses M=3.49, SD=.14). In this sense, the results obtained support Hypothesis 3c. On the other hand, Analytic-based group has a higher average level related Enterprising variable (M=2.49, SD=.13; M=3.21, SD=.15, respectively). According to data, the respondents by Analytic-based sample demonstrate to be more entrepreneur compared to participants with arts background. Despite of its significant

difference, H3e states that should not exist distinction between answers' groups values, what it's not sustained by results acquired.

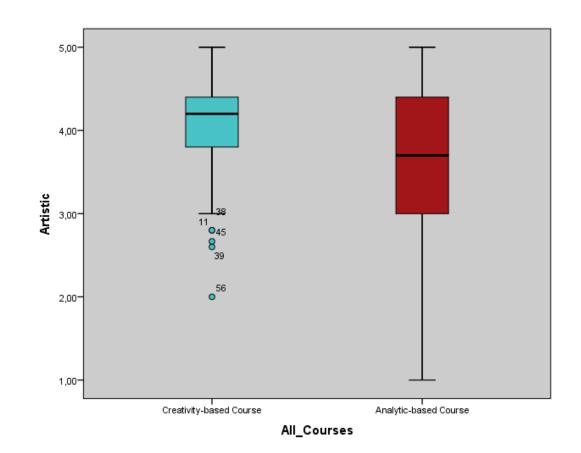


Figure 3.5. – Artistic Interest (RIASEC) – response levels of both groups

Regarding Hypotheses 4, we conducted a regression analysis to study the relationship between participants' RIASEC interest profile and transformational leadership style. In other words, it's intended to verify which RIASEC interests predict a transformational leader, considering the group to which participants belong. Both models comprise the criteria required to a regression analysis.

Model 1 represents Creativity-based group regression (F= 10429, p= .224; D-W= 1.7). Due to its *p-value* being higher than .05, it demonstrates that is not a valid model. So, in artistic background sample, we are not able to conclude that RIASEC interests reveal a prediction influence to be a transformational leader. In this sense, none of hypotheses is supported.

On the opposite, Analytic-based model shows itself valid as well as a clear significance level (F= 3.384, p<0.05, D-W= 2.2), on relationship between some RIASEC variables and transformational leadership profile.

ANOVAª							
All_Courses	Mod	lel	Sum of Squares	df	Mean Square	F	Sig.
Creativity-based	1	Regression	1,488	6	,248	1,429	,224 ^b
Course		Residual	8,162	47	,174		
		Total	9,650	53			
Analytic-based	1	Regression	5,729	6	,955	3,384	,007°
Course		Residual	13,260	47	,282		
		Total	18,989	53			

Table 3.6. Regression Analysis Models

a. Dependent Variable: TransfLeadership

b. Predictors: (Constant), Realistic, Social, Conventional, Artist, Investigative, Enterprising

c. Predictors: (Constant), Realistic, Enterprising, Social, Investigative, Artist, Conventional

According to regression data results, Artistic (β = 2.336, p=.24), Social (β = 2.123, p=.39) and Enterprising (β = 2.398, p=.21) variables demonstrate to be statistically significative, what means that those factors are predictors of transformational leadership profile in Analytic-based group. Specifically, this group reveals a Choreographer RIASEC profile (ASE) as stated in Hypotheses 5.

Table 3.7: Predictive variables of Transformational Leadership (Multiple Regression)

Artistic	2.336*	
Social	2.123*	
Enterprising	2.398*	
$R^2 Adj$	usted	.213
F (6,47)	3.384*

*p<0.05

In sum, below we present an overview of which hypotheses are corroborated:

Hypothesis 1: Managers rank lower than Performing Artists on transformational leadership:

H1a: Managers rank lower than Performing Artists on idealized influence – attribute.	N/A
H1b: Managers rank lower than Performing Artists on idealized influence – behavior.	*
H1c: Managers rank lower than Performing Artists on inspirational motivation.	×
H1d: Managers rank lower than Performing Artists on intellectual stimulation.	×
H1e: Managers rank lower than Performing Artists on individualized consideration	N/A

Hypothesis 2: Managers rank higher than Performing Artists on transactional leadership:

H2a: Managers rank higher than Performing Artists on contingent reward. Not tested	N/A
H2b: Managers rank the same of Performing Artists on management by exception (passive).	1
H2c: Managers rank the same of Performing Artists on management by exception (active).	~
H2d: Managers rank the same of Performing Artists on laissez-faire.	~

Hypothesis 3: <u>Performing Artists rank higher than Managers on RIASEC profile interests -</u> <u>Artist, Social and Entrepreneur - required to be a transformational leader:</u>

H3a: Managers rank the same of Performing Artists on Realistic.	*
H3b: Managers rank the same of Performing Artists on Investigative.	*
H3c: Managers rank lower than Performing Artists on Artistic.	\checkmark
H3d: Managers rank lower than Performing Artists on Social.	*
H3e: Managers rank the same of Performing Artists on Enterprising.	
H3f: Managers rank higher than Performing Artists on Conventional.	

Hypothesis 4: <u>Performing Artists that rank high on transformational leadership present a</u> positive association to a specific RIASEC interest-profile: Artistic, Social and Enterprising:

H4a: In Performing Artists group, Realistic is positively associated with Transformational	•
leadership.	
H4b: In Performing Artists group, Investigative is not associated with Transformational	*
leadership.	
H4c: In Performing Artists group, Artistic is positively associated with Transformational	×
leadership.	••
H4d: In Performing Artists group, Social is positively associated with Transformational	×
leadership.	
H4e: In Performing Artists group, Enterprising is positively associated with	×
Transformational leadership.	
H4f: In Performing Artists group, Conventional is not associated with Transformational	×
leadership.	·

Hypothesis 5: <u>Managers that rank high on transformational leadership, present positive</u> association to a specific RIASEC interest-profile: Artistic, Social and Enterprising:

 \checkmark

H5a: In Managers group, Realistic is positively associated with Transformational leadership.

H5b: In Managers group, Investigative is not associated with Transformational leadership.H5c: In Managers group, Artistic is positively associated with Transformational leadership.

H5d: In Managers group, Social is positively associated with Transformational leadership.H5e: In Managers group, Enterprising is positively associated with Transformational leadership.

H5f: In Managers group, Conventional is not associated with Transformational leadership.

Chapter IV – Discussion and Conclusions

Based on literature review, several authors (e.g. Lunenburg, 2011; Bennis, 2007) explored leadership and management differences due to their role in organizations. Moreover, other researchers (e.g. Adler, 2006) advocated the importance of leaders' artistic skills such as creativity, innovation, and capacity to improvise, to improve organization effectiveness.

In this sense, the current study aims to empirically test the linkage between art-based individuals and transformational leadership as well as between analytic-based individuals and transactional leadership. Additionally, we intended to test the idea that transformational leaders are associated with choreographer RIASEC profile (O*Net, 2017). We expect to conclude how significant might arts-based methods be on business environment.

Before testing hypotheses, we conducted factorial analysis to understand the construct validity of criterion variables, and also checked each factor reliability. To match standard parameters of good psychometric properties, we could not preserve most of original measures. Hence, transformational leadership, originally composed by five factors, was reduced to a three-factor solution: Inspirational Motivation, Idealized Influence (Behavior-charisma), and Intellectual Stimulation. Idealized-Influence (Attribute-charisma) Individual and Consideration were excluded due to poor commonalities. The same analysis was conducted to transactional leadership which end up with a three-factor solution too: Management by Exception Active, Passive, and Laissez-faire. Furthermore, the lack of reliability of Contingent Reward variable (Cronbach α = .489) suggests this factor does not apply to group leadership in students as they lack the legitimate power to reward contingently. This situation may find explanation in the sample being comprised of students, where leadership processes (e.g. in group assignments) is not in parallel with professional group leadership. In other words, the way students interpret the questionnaire is not comparable to workers.

In addition, it is usual in universities that any member of a team is accepted to delineate and guide group performances. Leadership in these circumstances has no parallel with that of leader-follower have in companies. Their relationship is more based on friendship and not on so formally principles. These inherent characteristics do not allow students to see someone as a hierarchical responsible (Page & Donelan, 2010).

Regarding those criterion variables, none of the hypotheses of transformational and transactional leadership (H1 and H2) were corroborated. So, we cannot state on the basis of these findings that Performing Arts ranked higher on transformational leadership and lower

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on transactional leadership than Managers. We believe the nature of the sample might explain this.

According to O*Net survey measure, to validate the reliability of constructs we conducted a Factorial analysis, namely a Principal Components Analysis (PCA). We found a valid six-factor solution composed by all RIASEC components: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Three of the hypotheses stated were linked to this, being Hypothesis 3 concerned about comparing RIASEC profile interests between the two groups, since Performing Artists should rank higher than Managers on Artist, Social and Enterprising types as required to be a transformational leader. Effectively, two significant differences were observed, specifically on Artist and Enterprising interests.

Creativity-based group showed a higher level of Artistic type. Thus, as expected, individuals from arts should be more innovative and creative than managers (Taylor & Ladkin, 2009). On the other way, Enterprising level was expected to be the same on creativity-based group (performing arts participants) and analytic-based group (managers). However, the analytic-based group ranked higher than creativity-based group. This result can be supported by entrepreneurial education which have been growing at business schools. More than ever, schools and universities instill proactivity, initiative, and entrepreneurship in students. Since early, individuals are educated in this way to have success on their future, mainly at profession level. Also, globalization, crisis, and evolving technology have been influenced and changed the dynamics and demands of market (Adler, 2006). Despite of this general and transversal mindset, business/management courses nurture more this kind of thinking due to market competitiveness (Peterman & Kennedy, 2003). This can be the reason for the results above, as business world requires an extremely dedication to goals' achievement and evidence of productivity growth.

Social interest did not show any significant results, against our expectation. This type should be higher on Performing Artist than Managers as stated by O*Net Choreographer profile (O*Net, 2017). In addition, social interaction is a crucial component on arts due to artists' necessity on working together, as for instance in improvisation, in creating new pieces and exploring new ways to improve their performances (Bozic & Olsson, 2013).

In Universities, there is still a mutual aid environment as well as the fact that students recognize this academic period as a contribution to enhancement of social component, maturity, responsibility. To achieve that, students require support from each other, since most of them leave parents' house and need to be independent. In this sequence, social interest level does not seem to diverge among undergraduate people (Petrova, et al., 2016).

Concerning Hypotheses 4 and 5, we conducted a regression analysis to test if RIASEC interests of an artistic leader – Artistic, Social and Enterprising - would predict a transformational leader. Hypothesis 4 stated that performing artists rank high on transformational leadership present a specific RIASEC interest-profile: Artistic, Social and Enterprising. This was not corroborated, meaning that there is not any plausible predictive relation in creativity-based group between choreographer O*Net description and transformational leadership style. Once again, the nature of the sample may have biased findings.

On the other hand, Hypothesis 5 was corroborated, meaning that analytic-based students that rank high on transformational leadership, have choreographer's RIASEC interest-profile, as expected. In other words, Artistic, Social and Enterprising interests can be interpreted as predictors of transformational leadership type within the analytic-based group. This result was obtained from a regression analysis which is deployed on a plausible cause-and-effect relationship. Nevertheless, it is worth mentioning that this study design is not of an experimental nature, therefore its conclusions must be interpreted cautiously.

According to literature review, performing arts' work procedures hold themselves on specific principles, as for instance, improvisation to get more material, to find new ways of doing something, to be creative and consequently, innovative (Austin & Devin, 2003). Those methods known by arts-based allow the key-competences development (Brenner, 2014).

Moreover, based on several studies, the skills developed on artistic environment match transformational leadership characteristics, since this leadership style must embrace creative and innovative behaviors, to improve work processes and adapt to market demands (Bass & Riggio, 2006). Thus, we can conclude that arts-based methods reveal an appropriate contribute to acquire the desired abilities to remain competitive on market. So, regarding our current study, as shown on Hypothesis 5, analytic-based group with choreographer O*Net profile (representative of artistic leaders) are more prepared to lead with market requirements, due to their leadership profile being closer to transformational style.

We should acknowledge that H5 is not per se sufficient indication that our departing idea was correct. It is but just a mere suggestion as the fact that analytic-based students higher on transformational leadership have a choreographer RIASEC profile does not mean the explaining factor lies in the course. Quite the opposite, if it has to do with traits, then, it lies in themselves and not in the specificities of teaching in arts. However, it is true that the choice of courses is in each student interests, and not in some external authority, i.e. the choice of the courses is entirely up to students, which means they should also chose what fits better with

their own dispositional nature. Despite situational variables, dispositional must play a role in this choice. Therefore, although courses may or may not operate changes in competencies linked to innovation, it is quite reasonable to accept that they most probably will depart from individual features to enable the best possible competency learning along the teaching process.

In sum, the market requires leaders who are able to get around obstacles and who have capacity to inspire, stimulate and motivate followers. In addition, leaders should comprise creativity and innovation skills, since they are recognized as the most competitive resource, as well as instill those on followers (Hoogh, Hartog, & Koopman, 2005). Their role is very important in companies, due to their influence on organizational culture and consequently on employees' performance. Followers will behave accordingly to organization rules, nevertheless someone should be an example to motivate them to collaborate (Choudhary, 2014).

In the sequence of leadership styles, literature presents transformational leadership as the most efficient to protect organizational competitiveness. These are the kind of leaders who know how to deal with the chaos and dynamics of the market. As the name implies, this style of leadership is based on transformation, on creating new working processes and seeing what others are not able to (Damanpour & Schneider, 2008). Therefore, if modern society is demanding creativity and innovative professionals, no one is better than artists to teach how to enhance creativity and innovation levels. It is focused on arts-based methods that business can develop the key-competencies on their employees and subsequently improve its performance and productivity (Adler, 2006).

Regarding the current study, although not all hypotheses found support, we have interesting evidences. The principal one was showing that transformational leadership comprised artistic characteristics. In other words, individuals with a choreographer's RIASEC profile, have a transformational leadership style. So, as mentioned previously, performing arts leaders prove to have the adequate profile, concerning market needs. This idea allows us to conclude that competencies developed on arts environment (on top of RIASEC profile) are beneficial to leadership effectiveness. This may suggest our study has some added value to literature. Also, it suggests the idea of implementing arts-based methods on academic education, in order to prepare students to real business world. Without artistic skills, such as creativity and innovation competencies, it would be difficult to be efficient and perform according to market demands.

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Furthermore, based on explanations above, it is possible to concur that business world requires leaders instead of managers. According to Bennis (1989 cf. Lunenburg, 2011, p.2) "To survive in the twenty-first century, we are going to need a new generation of leaders leaders, not managers. The distinction is an important one. Leaders conquer the context—the volatile, turbulent, ambiguous surroundings that sometimes seem to conspire against us and will surely suffocate us if we let them—while managers surrender to it".

The current study has some limitations which can explain the absence of significant results on some hypotheses. First of all, based on Principal Components Analysis several items, even entire factors were eliminated, thus neither MLQ questionnaire nor RIASEC survey remain intact. Nonetheless, the reliability of factors included on the final solutions are compliant to requisites.

Another constraint of this investigation is related to MLQ nature which was primarily built to measure transformational and transactional leadership on workplaces (Bass, & Avolio, 2004). Due to sample characteristics, leadership inquiries may not make entire sense, since relationships established amongst students are not guided by formal principles. Organizations implement categories according to each role function, creating a professional dynamic between followers and leaders. Furthermore, the sample includes individuals who volunteered to participate on this study, jeopardizing external validity. Beyond sampling procedure, sample size also affects data collection (Rothwell, 2005).

To overcome these sample limitations, for future studies, we suggest changing methodologic procedures: MLQ should be applied on workplace context to individuals who could express themselves about their leaders' style; sample should be random to increase external validity, making results more trustworthy; finally, the number of responses must follow a rule which states a minimum of 5 participants for each questionnaire item (Schulz, Altman & Moher, 2010).

One more recommendation concerns the type of study. We would acknowledge that experimental scientific method would be more informative, allowing us to confirm causal nexus however the nature of RIASEC profile is not suitable to manipulation (only if group criteria predicted a specific RIASEC profile for each condition). In other words, we would be able to support the idea of RIASEC interests behavior as baseline features that makes individuals more prone to identify with transformational leadership style (Marôco, 2010).

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Appendixes

Appendix A - Comparison of leadership roles in the ancient family vs. modern corporation

	Ancient the family	Modern corporation
Core leadership issues		
Fundamental purpose	Long term preservation of the extended family and its name	Short term maximization of profits
Relationship with larger collectivities	Family embedded within clan within city-state	Separation of powers within nation-state
Size of focal family unit	40 to 100 members	2 to 6 members
Composition/integration of leadership roles	Highly integrated	Intentionally separated, smaller, and more homogeneou
Social stratification and relationship	Highly stratified (including slavery)	Low stratification (rejection of slavery)
with followers	Hierarchical, patronage-based	Egalitarian, consultative and participatory
Criteria for decision making	Subjective	Objective
Ancillary leadership issues		
Approach to wealth creation	War against non-citizens	War against nature
Approach to business creation	Nepotism encouraged	Nepotism forbidden
Approach to technology	A state secret primarily for military advantage	Engineering and innovation as an open, societal
	and to maintain the status quo	enterprise for wealth creation
Approach to gender	Masculine and segregated	Neutral and integrated
Dominant-ideal type	"Pater familias"	"Entrepreneur of the Year"

(Markham, 2012)

Appendix B – Leadership Evolution until Transformational Theory

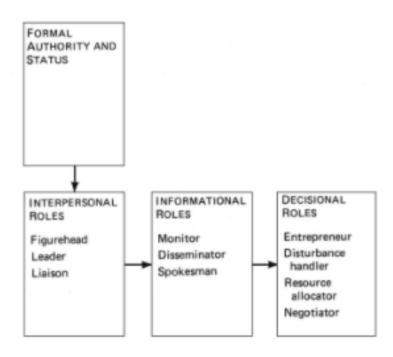
Great Man Theories	Based on the belief that leaders are exceptional people, born with innate qualities, destined to lead. The use of the term 'man' was intentional since until the latter part of the twentieth century leadership was thought of as a concept which is primarily male, military and Western. This led to the next school of Trait Theories
Trait Theories	The lists of traits or qualities associated with leadership exist in abundance and continue to be produced. They draw on virtually all the adjectives in the dictionary which describe some positive or virtuous human attribute, from ambition to zest for life
Behaviourist Theories	These concentrate on what leaders actually do rather than on their qualities. Different patterns of behaviour are observed and categorised as 'styles of leadership'. This area has probably attracted most attention from practising managers
Situational Leadership	This approach sees leadership as specific to the situation in which it is being exercised. For example, whilst some situations may require an autocratic style, others may need a more participative approach. It also proposes that there may be differences in required leadership styles at different levels in the same organisation
Contingency Theory	This is a refinement of the situational viewpoint and focuses on identifying the situational variables which best predict the most appropriate or effective leadership style to fit the particular circumstances
Transactional Theory	This approach emphasises the importance of the relationship between leader and followers, focusing on the mutual benefits derived from a form of 'contract' through which the leader delivers such things as rewards or recognition in return for the commitment or loyalty of the followers
Transformational Theory	The central concept here is change and the role of leadership in envisioning and implementing the transformation of organisational performance

Appendix C – Comparison features of the transactional and transformational leadership

	Transactional Leadership	Transformational Leadership
	Works within a system.	Works to change a system.
How it works	Starts solving by fitting experiences to a known pattern.	Starts solving by finding experiences that show the old pattern doesn't fit.
Works	Asks "where's the step-by-step?"	Asks "what do we need to change?"
	Minimizes variation of the organization.	Maximizes capability of the team.
What it	Expects everyone meet a standard.	Inspires many people to give their best.
does	Can be duplicated and sustained.	Requires minimal structure.
	Best at delivering defined results.	Best at delivering innovation.

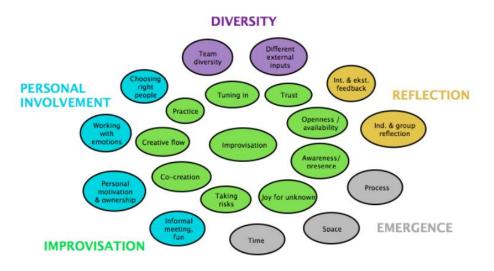
(Baesu & Bejinaru, 2015)

Appendix D – Manager's role



(Mintzberg, 1989, p. 16)

Appendix E – Choreographer work processes



Bozic and Olsson (2013)

Appendix F – Measure (*Survey*)

Survey

No âmbito do mestrado em Psicologia Social e das Organizações, no ISCTE - Instituto Universitário de Lisboa, proponho-me estudar perfis de competências de <u>liderança em âmbito de trabalho de grupo</u> com o objetivo geral de compreender a sua associação a percursos formativos no ensino superior.

O seu contributo é muito importante para uma melhor compreensão desta temática pelo que lhe pedimos que responda com a maior sinceridade. Não há respostas certas nem erradas e os seus dados são integralmente anónimos e confidenciais. Por favor não escreva o seu nome em nenhuma parte. O tempo de resposta estimado é de 10 minutos.

Caso tenha qualquer dúvida, não hesite em contactar-me através do e-mail mbfrm@iscte-iul.pt ou em contactar o professor responsável pela coordenação da dissertação de mestrado nelson.ramalho@iscte.pt.

Obrigada pela sua disponibilidade e colaboração! Margarida Bessa Marques

Q15 Curso que frequenta ou que frequentou

Artes (dança, teatro, música, etc.) (1)

Ciências Sociais e Humanas (Sociologia, etc.) (2)

Engenharia (biomédica, civil, etc.) (3)

Economia (4)

- O Gestão (5)
- 🔾 Línguas (6)
- O Medicina (7)

Outro. Qual? (8) _____

Q22 Em que ano no Ensino Superior se encontra?

○ 1º ano licenciatura (1)
○ 2º ano licenciatura (2)
○ 3º ano licenciatura (3)
○ 1º ano mestrado (4)
○ 2º ano mestrado (5)
Outro. Qual? (8)

Q6 Está envolvido/pratica ou <u>praticou</u> algum tipo de arte, <u>mais de um ano</u>? (dança, pintura, canto, etc.)

🔿 Não (2)

O Sim. Qual? (1) ______

Q1 As seguintes afirmações descrevem a forma como se relaciona com outras pessoas <u>em contexto</u> <u>de trabalho de grupo</u>. Indique até que ponto concorda que se aplicam a si.

Nunca (1)	Raramente (2)	Algumas vezes (3)	Muitas vezes (4)	Frequentemente ou sempre (5)
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Ajudo os meus colegas de grupo apenas quando sinto que se esforçam. (1)

Questiono a forma como abordamos um trabalho no grupo, perguntando se será adequada. (2)

Nunca interfiro em problemas no grupo exceto quando se tornam sérios. (3)

Durante os trabalhos de grupo, foco a minha atenção em irregularidades, erros, e desvios face ao combinado. (4)

Evito envolver-me quando surgem assuntos importantes porque penso que o grupo deveria resolvê-los sem mim. (5)

Converso com os meus colegas de grupo sobre as minhas crenças e valores mais importantes. (6)

Procuro estar ausente quando os meus colegas pensam desnecessariamente que necessitam de mim. (7)

Quando o meu grupo se depara com um problema, procuro alternativas diferentes para o solucionar. (8)

Falo de forma otimista sobre o futuro. (9)

Procuro que os meus colegas se sintam orgulhosos por pertencerem ao meu grupo. (10)

Procuro que o meu grupo torne claro quem é responsável por atingir cada meta específica de desempenho. (11)

Não sou muito ativo/a exceto quando deteto alguma coisa errada. (12)

Tento sempre falar com entusiasmo aos meus colegas de grupo sobre o que precisamos de realizar. (13)

Procuro reforçar no meu grupo um sentido de propósito/missão que vá além de obter boas notas. (14)

Invisto tempo a partilhar o que sei e a ajudar cada um dos meus colegas de grupo a compreender a matéria em função da sua necessidade. (15)

Tento que fique claro o que cada um de nós ganha se atingirmos os objetivos. (16)

Nos trabalhos de grupo, acredito sempre que "o ótimo é inimigo do bom". (17)

Sacrifico o meu interesse pessoal em nome do meu grupo. (18)

Q16 As seguintes afirmações descrevem a forma como se relaciona com outras pessoas <u>em</u> <u>contexto de trabalho de grupo</u>. Indique até que ponto concorda que se aplicam a si.

Nunca (1)	Raramente (2)	Algumas vezes (3)	Muitas vezes (4)	Frequentemente ou sempre (5)
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Trato cada um dos meus colegas de grupo de forma singular, e não como apenas como mais um membro do grupo. (1)

Só me procuro sobrepor quando sinto que os problemas se vão repetindo no grupo. (2)

Ajo de forma a conseguir que o meu grupo me respeite. (3)

Quando em trabalho de grupo, concentro toda a minha atenção nos possíveis erros que os outros possam estar a fazer. (4)

Mantenho sempre presente as consequências éticas e morais das decisões ao longo do trabalho de grupo. (5)

Estou atento/a a todos os erros que os outros possam estar a cometer. (6)

Transmito ao grupo uma imagem de capacidade e confiança. (7)

Sempre que falamos do futuro no grupo procuro dar uma visão positiva e motivadora. (8)

Estou sempre atento/a às possíveis falhas nos trabalhos, para garantir o máximo possível na avaliação. (9)

Evito tomar decisões quando sinto que o grupo as deveria tomar como um todo. (10)

Vejo cada um dos meus colegas de grupo como uma pessoa com necessidades, capacidades e ambições diferentes face aos outros. (11)

Faço com que os meus colegas de grupo procurem ver os problemas a partir de diferentes pontos de vista. (12)

Ajudo os meus colegas de grupo a desenvolverem os seus pontos fortes. (13)

Durante o trabalho de grupo sugiro novas alternativas e maneiras de trabalhar. (14)

Faço por demorar algum tempo a responder às questões quando me dizem que é urgente, a ver se decidem por si só. (15)

Enfatizo a importância de partilharmos no grupo um sentido de missão que vá além de uma boa avaliação. (16)

Mostro-me satisfeito/a e elogio quando os meus colegas correspondem às expectativas. (17)

Procuro sempre mostrar confiança em como conseguimos no grupo alcançar as metas. (18)

Q24 De seguida são apresentadas várias tarefas profissionais. Procure responder até que ponto gosta ou gostaria de as fazer independentemente de sentir que tem ou não a formação e a experiência para as fazer e também independentemente de quanto dinheiro poderia ganhar com elas.

Q14 Indique em que medida gosta ou gostaria de executar as seguintes tarefas profissionais



Construir armários de cozinha. (1)
Colocar tijolo ou telha. (2)
Desenvolver um novo remédio. (3)
Estudar formas de diminuir a poluição da água. (4)
Escrever livros ou peças. (5)
Tocar um instrumento musical. (12)
Ensinar a uma pessoa uma rotina de exercícios. (13)
Ajudar indivíduos com problemas pessoais ou emocionais. (14)
Comprar e vender ações e títulos. (15)
Gerir uma loja de tecidos. (16)
Desenvolver uma base de dados usando um software de computador. (17)
Revisão de registos ou formulários. (18)

Q18 Indique em que medida gosta ou gostaria de executar as seguintes tarefas



Reparar aparelhos domésticos. (1) Criar peixe num viveiro de peixes. (2) Conduzir experiências químicas. (3) Estudar o movimento dos planetas. (4) Compor música. (5) Desenhar imagens. (12) Dar orientação profissional. (13) Desempenhar terapia de reabilitação. (14) Trabalhar num salão de beleza ou num barbeiro. (15) Gerir um departamento numa grande empresa. (16) Instalar softwares em computadores numa grande rede. (17) Trabalhar com uma calculadora. (18)

Q19 Indique em que medida gosta ou gostaria de executar as seguintes tarefas



Montar peças eletrónicas. (1)
Conduzir um trator e entregar encomendas em casas e escritórios. (2)
Análise de amostras sanguíneas com microscópio. (3)
Investigação da causa de um incêndio. (4)
Criar efeitos especiais para filmes. (5)
Pintar cenários para peças artísticas. (12)
Fazer voluntariado em empresas sem fins-lucrativos. (13)
Ensinar crianças a fazer desporto. (14)
Começar com um negócio próprio. (15)
Negociar contrato comercial. (16)
Manutenção de envio e receção de registos. (17)
Calcular os salários dos empregados. (18)

Q20 Indique em que medida gosta ou gostaria de executar as seguintes tarefas



Montar e configurar máquinas para fazer produtos. (1) Apagar incêndios florestais. (2) Inventar um substituto do açúcar. (3) Fazer testes de laboratório para identificar doenças. (4) Cantar numa banda. (5) Editar filmes. (12) Cuidar de crianças numa creche. (13) Ser Professor do secundário. (14) Vender mercadoria num departamento de uma loja. (15) Gerir uma loja de roupa. (16) Manter registos de inventários. (17) Carimbar, classificar e enviar e-mails para uma organização. (18)

Q21 Indique em que medida gosta ou gostaria de executar as seguintes tarefas



Testar a qualidade das peças antes de as enviar. (1) Reparar e instalar fechaduras. (2) Desenvolver uma forma mais eficaz de prever as condições climatéricas. (3) Trabalhar num laboratório de biologia. (4) Escrever excertos para programas televisivos ou séries. (5) Dançar Jazz ou Sapateado. (12) Ensinar linguagem gestual a pessoas com problemas auditivos. (13) Ajudar a conduzir uma sessão de terapia de grupo. (14) Representar um cliente numa ação judicial. (15) Comercializar uma nova linha de roupa. (16) Criar um inventário a partir de um computador portátil. (17) Reportar pagamentos de rendas. (18)

Q23 Sexo

• Feminino (1)

Masculino (2)

Q7 Idade

Q13 O questionário terminou. Muito obrigado pela sua colaboração.

$\label{eq:appendix} \textbf{Appendix} \; \textbf{G} \text{ -} \textit{Principal Components Analysis} - \textit{Transactional Leadership}$

Rotated Component Matrix ^a						
	Component					
	1	2	3	4		
TS_Laissez1-Evito envolver-me quando surgem assuntos	,808,	-,004	-,052	,142		
importantes porque penso que o grupo deveria resolvê-los						
sem mim.						
TS_Laissez2-Procuro estar ausente quando os meus colegas	,803	,052	,095	,093		
pensam desnecessariamente que necessitam de mim.						
TS_Pas2-Não sou muito ativo/a exceto quando deteto alguma	,686	,068	,347	,021		
coisa errada.						
TS_Act_mbe3-Estou atento/a a todos os erros que os outros	-,106	,824	,059	,256		
possam estar a cometer.						
TS_Act_mbe2-Quando em trabalho de grupo, concentro toda	,159	,816	-,176	,066		
a minha atenção nos possíveis erros que os outros possam						
estar a fazer.						
TS_Act_mbe4-Estou sempre atento/a às possíveis falhas nos	-,009	,741	,282	,067		
trabalhos, para garantir o máximo possível na avaliação.						
TS_Pas4-Só me procuro sobrepor quando sinto que os	,149	,012	,761	,120		
problemas se vão repetindo no grupo.						
TS_Laissez3-Evito tomar decisões quando sinto que o grupo	,072	,217	,758	-,022		
as deveria tomar como um todo.						
TS_Pas_mbe1-Nunca interfiro em problemas no grupo exceto	,497	-,216	,553	-,131		
quando se tornam sérios.						
TS_CRew2Procuro que o meu grupo torne claro quem é	,106	,341	,001	,701		
responsável por atingir cada meta específica de desempenho.						
TS_CRew3-Tento que fique claro o que cada um de nós	,234	,167	-,052	,687		
ganha se atingirmos os objetivos.						
TS_CRew4-Mostro-me satisfeito/a e elogio quando os meus	-,249	-,252	,459	,612		
colegas correspondem às expectativas.						
Cronbach Alpha	.696	.762	.629	.459		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.