ISCTE Business School
Instituto Universitário de Lisboa

THE CASE OF ORGANIZATIONAL BEHAVIOR IN PORTUGUESE JUNIOR ENTERPRISES:

EMBEDDEDNESS, WORK-LIFE BALANCE, MOTIVATION AND SATISFACTION

Sónia Maria Ribeiro Filipe

Project submitted as partial requirement for the conferral of

Master in Business Administration

Supervisor:

Luís Fructuoso Martinez, Professor Auxiliar, Nova School of Business and Economics, Universidade Nova de Lisboa

October 2013

The greatest accomplishment is not in never falling,

but in rising again after you fall.

Vince Lombardi

Acknowledgments

"Appreciation is a wonderful thing: It makes what is excellent in others belong to us as well", Voltaire

I would like to start by thanking my family for all their support, especially to my mother, sister and father, for all their love and understanding.

I would also like to thank Professor Graça Trindade, who gave me greatest support in the last stage of this thesis and who was always available for me, giving me one of the most encouraging words I have already received: Thank you! Other special thanking is for Professor Luís Martinez who gave me the opportunity to work with him.

I also want to leave a thanking word to ISCTE Junior Consulting, once it was the greatest turning point in my academical and professional life, allowing me to grow, not only as a professional, but also as a person. Therefore, I appreciate the support of all IJC's member and all the teachings each one of them gave me, because if it was not for them, this would not be the subject of this thesis.

Other two people that were really important for the conduction of the present research were Pedro Lourenço and Eloísa Ferreira, in representation of JADE Portugal, whose support was really important for me.

Continuing, and looking back to what was the beginning of this period of my life, I want to thank my two BG, Heloísa Costa and Joana Santana for being the two people who incentivized me the most to perform this research and who gave me a greatest support during all this process.

One of the most important person and to whom it is indispensable to thank, is Mariana Silva. I thank her for all the late nights at ISCTE, for all the rides home, laughs and, mainly, for her support and presence in every single situation.

I would also like to thank to all of my other friends, who are amazing and the most comprehensive people in the world. A special word to the ones that always were (and are) by my side: Rita Pedroso, Tânia Demétrio, Salomão Antunes, João Diaz, André Casanova and Ana Correia.

Last, but not least, I thank my co-workers at Heading, who were really patient and who were always available for me, with a special remark for Sara Pinheiro, Sara Alves, Joana Maldonado and Fabíola Vaz.

Abstract

In nowadays' context, it is becoming increasingly important for the new entrants in the labor market to differentiate themselves from the others and to be perceived as relevant and valuable human resources. In order to achieve this, students are starting to engage in several different initiatives that improve their résumé, such as Junior Enterprises.

This type of enterprises, which were created in 1967, has been developed in several countries, with special incidence in European ones and also in Brazil. In short, they appear as an opportunity for the university's students to apply their knowledge into real companies, which are their clients.

Therefore, in order to deliver a good service, Junior Enterprises must assure a good performance from their members, which, according to several different authors, can be acknowledged through Job Embeddedness, Work-Life Balance, Motivation and Satisfaction.

Thus, this research, which was conducted with a sample of Portuguese Junior Entrepreneurs, concluded that Satisfaction impacts positively on Performance, as well as Work-Family Conflict. Other important conclusions of the present research were that Satisfaction acts as a mediator between Job Embeddedness and Performance, and also that Family-Work Conflict does not have a relationship with Performance. Regarding Motivation, it was not possible to study the relationship of this variable with any other, due to the lack of confirmation of required dimensions.

Keywords: Job Embeddedness, Satisfaction, Work-Life Balance, Junior Enterprises

JEL Classification System:

M12 - Personnel Management;

M54 – Labor Management

Resumo

No contexto económico e empresarial atual, torna-se importante para os recém-chegados ao mercado de trabalho que sejam capazes de se diferenciar dos demais e, também, que sejam percecionados como recursos humanos relevantes e valiosos. Para que este objetivo seja alcançado, os estudantes começam a envolver-se em diferentes atividades extra-curriculares, como forma de melhorar o seu *curriculum vitae*, tal como é o caso de Júnior Empresas.

Este tipo de Empresas, que foi criado em 1967, tem vindo a surgir em diferentes países, com especial destaque em países Europeus e no Brasil. Desta forma, estas empresas destacam-se como uma oportunidade para os estudantes universitários aplicarem o seu conhecimento em empresas reais, que se assumem como seus clientes.

Assim, de forma a oferecerem um bom serviço aos seus clientes, as Júnior Empresas devem assegurar um bom desempenho da parte dos seus membros, o que, de acordo com diversos autores, pode ser alcançado através da sua integração, motivação e satisfação, bem como através de um adequado equilíbrio entre a vida pessoal e profissional dos membros.

Este estudo, conduzido numa amostra de Júnior Empresários Portugueses, demonstrou, então, que a Satisfação impacta positivamente no Desempenho, tal como o Conflito Trabalho-Família. Para além disto, outras conclusões importantes foram a de que a Satisfação funciona como um mediador entre a Integração e o Desempenho e, também, a de que o Conflito Família-Trabalho não se relaciona com o Desempenho dos membros. Finalmente, e relativamente à Motivação, não foram possível tirar qualquer conclusão relativamente à relação entre esta variável e qualquer outra, devido à falta de confirmação das dimensões necessárias a esse estudo.

Palavras-Chave: Integração, Satisfação, Balanço Vida-Trabalha, Júnior Empresas

Index

Index of Figures

Index of tables

Executive Summary

It has been verified an increase in the youth unemployment rate, which makes young people search for new sources of differentiation and improvement of know-how, namely through the enrollment in extracurricular activities that allow the application of content knowledge, since they are valorized by the recruiters when analyzing a résumé.

Therefore, the concept of Junior Enterprise has been gaining interest and awareness, as a way for the students to develop their skills and knowledge, but also as a way for the companies to be able to get consulting services with a lower cost associated.

However, in order to deliver a good service to its clients, Junior Enterprises must assure that its members are performing at their highest, so that the global performance of the company is also the best possible, allowing them to be competitive in the market, when compared to direct competitors, which are the other Junior Enterprises, but also when compared to indirect competitors, which are the other Consulting Firms.

Thus, when defining a research framework that would enable to study possible variables that may impact on performance, four concepts have arisen, which were then studied.

The first one was Job Embeddedness, which refers to "*the combined forces that keep a person from leaving his or her job*" (Yao *et al* (2004), cited by Crossley *et al* (2007)); the second one was Work-Life Balance, which refers to the equilibrium between both roles of an individual's life (professional and personal); the third one was Motivation, which refers to "*the power that strengthens behavior, and triggers the tendency to continue*" ((Farhad et al, 2011; Manzoor, 2011); and, finally, the fourth one was satisfaction, which is "*an attitudinal variable that reflects the degree to which people like their jobs*" (Spector, 1997, cited by Miryala & Thangella, 2013).

So, in order to empirically test if all of these variables impact positively in the performance, it was conducted a study in a sample of 109 Portuguese Junior Entrepreneurs (current members or alumni), through an online web-based survey.

From descriptive statistics it was concluded that, within this sample, the majority of the founding JE's members have management positions, and that it is very frequent for the members to stay linked to a JE for a period of two years.

Other conclusion reached with empirical testing was that Job Embeddedness, Satisfaction and Performance are organized according to only one dimension each, as it was expected after the literature review. Despite this, Work-Life Balance is composed by two different dimensions, which are Work-Family Conflict and Family-Work Conflict, as proposed by Netemeyer *et al* (1996). However, when the analyzed variable was Motivation, which was going to be analyzed through the Job Design Survey, the conclusion of the present research was that the five dimensions needed in order to calculate the Motivating Potential Score, did not verify and instead, six other dimensions were proposed.

Continuing the results' analysis, it was possible to conclude that both Satisfaction and Work-Family Conflict proved to be positively related with Performance; that Family-Work Conflict does not have a relationship with Performance; and also that the relationship between Job Embeddedness and Performance is mediated by Satisfaction. Regarding Motivation, as previously presented, it was not possible to be studied due to the lack of necessary dimensions within the sample.

Therefore, the current study mirrors the relevance of making employees feel integrated and linked to the company, as a way to improve their satisfaction and, consequently, to improve the individual and organizational performance. This means that JE's managers must bear in mind the idea that adequate Human Resources practices are needed, in order to improve the quality of services provided, but also to improve members' know-how, which will make them valuable human resources, that stand out when applying to a job. So, this will enable young people to overcome the difficulties that were presented previously.

List of abbreviations

FWC – Family-Work Conflict

HPWS – High-Performance Work Systems

JE – Junior Enterprise

JI – Junior Initiative

MFI - Motivational Factor Inventory

MLRM – Multiple Linear Regression Model

MPS - Motivating Potential Score

OECD – Organization for Economic Co-Operation and Development

SLRM – Simple Linear Regression Model

WFC – Work-Family Conflict

WLB – Work-Life Balance

WLBP – Work-Life Balance Programs

1 Introduction

1.1 Research Problem

The economic crisis that started in the year 2008 had severe and direct effects not only on the unemployment rate but also on the youth unemployment rate (which refers to the group of unemployed persons aged between 15 and 24). According to the European Commission statistics (Appendix 1), until the end of 2008, "*the youth unemployment rate in the EU-27 has been around twice as high as the rate for the total population, reaching its minimum value (18.1 %) in the first quarter of 2008. However, in the beginning of 2009 the gap between the youth and the total unemployment rates has increased, so that at the end of 2012 the youth unemployment rate was 2.6 times the total rate*" (Eurostat, 2013).

This created a new awareness for university students in what it concerns to their résumés, meaning that they started to pay special attention to what they could do in order to overcome the problem of unemployment after the accomplishment of their degrees.

Therefore, and since the enrollment in extracurricular activities plays an important role in what it refers to the attention that is given to a résumé by recruiters (Nemanick Jr. & Clark, 2002), mainly if the extracurricular activity enables the application of content knowledge (Ward & Yates, 2013), it became important to analyze what were the alternatives that potentiate both factors: an extracurricular activity that applies the knowledge acquired in classes and that acts as a bridge to potential future jobs. When looking for the answer to this question, the concept of Junior Enterprise arose.

This concept, which is still being developed across the world (as it is possible to be further seen) aims to fulfill these recruiters' criteria. However, from the moment students are enrolled in such extracurricular activity, there are several factors that can affect their behavior and performance, such as motivation, satisfaction, work-life balance and embeddedness, mainly due to the fact that it assumes a great commitment from the members with nothing material in exchange, as it would possibly happen in an internship.

For that reason, it becomes important to analyze not only what makes students decide to apply and to join Junior Enterprises but also what makes them decide to stay and what affects their performance and behavior in the organizational context.

1.2 Characterization of the sector

1.2.1 The concept of Junior Enterprise and Junior Enterprise Movement

A Junior Enterprise (JE) is a non-profit social organization, which is formed uniquely by students that belong to the university to whom that Junior Enterprise is associated, which means that, as soon as a member finishes his connection to that same university, he should stop being a part of the JE in question.

These organizations provide services for clients, that may be private companies, institutions or society, in order to consolidate and enhance the learning of their members, which leads us to the main goal of JE's, that is related to the motto "learning by doing", meaning the opportunity to apply the concepts that they learn in a theoretical way, through classes, in a practical way, with direct implications to clients and visible results (what do not happen in academical essays), which reflects a connection between academic knowledge and the business world.

Still focusing on skills' development, besides the improvement of the technical skills, the membership in a JE also enables the members to develop other behavioral skills, highly relevant in modern economies and societies, such as communication, teamwork and self-confidence, among several others.

Other accomplished goal of a JE is the fact that it allows a boost at the local economy and also at the local context, in a social way. Explaining this in a more detailed way, this happens because the members of the Junior Enterprises can improve university's brand awareness and recognition, through the work that is done and the results that are achieved, which will most likely attract a greater number of students. Regarding its impact on local economy, and focusing on the fact that the great majority of the clients of JE's are SME's, Junior Enterprises will help them to improve their results and/or processes, depending on the type of services that are offered and negotiated.

Finally, other objective of the JEM is to enhance employability in the local market, among JE's members, once they reflect a proactive attitude towards personal development but, mainly, due to the fact that they keep in touch with real companies and have the opportunity to realize how they work but also to create important network with clients, partners and maybe future co-workers, which is one of the biggest motivating factors, when applying to a Junior Enterprise. Summing up, due to this accumulation of talents in one organization, Junior

Enterprises can help local companies to search for and employ talented, experienced and motivated students from one single place.

So, concluding what has been described previously, it is possible to state, according to JADE – European Confederation of Junior Enterprise (which will be presented afterwards), that "*Junior Enterprises are similar to real companies, counting with the principles of corporate governance like management council and executive board, and own regulation (…) fostering entrepreneurship spirit, being managed entirely by students, linked to a institution of higher education, aiming at sustainable activity and fostering members development*". This means that the JEM brings advantages to both parties involved, once companies (clients) can acquire knowledge and contact with the skills and proactivity of the Junior Entrepreneurs; and students can develop their entrepreneurial spirit and assume a new attitude towards the business environment.

1.2.2 Junior Enterprise Movement Worldwide

The first Junior Enterprise was created in France, in 1967 (*ESSEC - L'Ecole Supérieure des Sciences Economiques et Commerciales*), with the objective of providing consulting services to real companies, allowing the access to the business environment in a more direct way.

After that, at the 80's, this movement grew and started its internationalization process, being also established in Switzerland, Belgium, Spain, USA and Brazil.

In order to provide support and also to encourage the development of the JEM, the creation of new Junior Enterprises and the establishment of synergies among the existent JE's, in 1969 was created the first "Confederation of Junior Enterprises". Regarding this topic, and even though the movement is also present in countries such as Tunisia, Morocco, Canada and USA the biggest JE's confederations are "JADE" (responsible for European Federations of JE's) and "Brasil Júnior" (responsible for Brazilian JE's).

1.2.2.1 JADE – European Confederation of Junior Enterprises

Given the fact that the concept of Junior Enterprise was spreading really fast, a group of European countries (France, Italy, Deutschland and Switzerland) decided to create "JADE - European Confederation of Junior Enterprise" at the year 1992 with headquarters in France.

JADE, whose current headquarters are in Brussels, is an international, non-profit umbrella-organization of enterprises across Europe established and managed solely by students. JADE's Member States form 11 National Federations (as it can be seen in Table 1) and 2 Consultative Members (countries with only one active Junior Enterprise), representing about 280 JE's and more than 22.000 students (according to the current Vice-President of JADE Portugal, Pedro Lourenço).

Regarding its mission, it is "to represent the European JEM; to integrate the European Network of Junior Enterprises thus encouraging knowledge exchange and cooperation; to support the development of the members (Confederations and Consultative Members); to foster the Junior Enterprise Concept to non-member countries; and to encourage entrepreneurship among students in higher Education through Junior Enterprise Concept". In order to achieve this, JADE has several successful and well known partners, such as the European Comission and Microsoft, that help JADE to pursue its mission,

Summing up, JADE is an integrated network, through which Federations and Junior Enterprises can communicate with each other and have the opportunity to cooperate. Besides this, JADE also enables the development of Federations, once it provides a platform for knowledge exchange between the Junior Enterprises and Junior Entrepreneurs.

Table 1: JADE Europe's Federation and its characteristics

Country	Name of Federation	Year of creation	Number of Federated JE's
Portugal	JADE Portugal	2005	9 JE's
Romania	JADE Romania	2010	4 JE's
Spain	CEJE	N/A	26 JE's
France	CNJE	1969	160 JE's
Italy	JADE Italy	1992	7 JE's
Poland	JADE Poland	2006	N/A
Belgium	JADE Belgium	1998	6 JE's
Netherlands	UniPartners	1997	10 JE's
Germany	BDSU	1992	29 JE's
Switzerland	JADE Switzerland	1992	9 JE's
Austria	JADE Austria	1994	5 JE's

(**Source:** Federations' Websites, 2013)

1.2.3 Junior Enterprise Movement in Portugal

Despite the fact that the first Portuguese Junior Enterprise was created in 1990, "JADE Portugal – Federação de Júnior Empresas de Portugal" was founded in 2005 with the support of JADE Europe that, as it was explained earlier, is the European Confederation of Junior Enterprises. Currently, the Portuguese Federation of Junior Enterprises gives support to 9 federated Junior Enterprises and about 16 Junior Initiatives that are still working in order fulfill the requirements of the federation.

JADE Portugal's statement of mission and vision is quite similar to the one of JADE Europe, as its mission is: to promote and to expand the concept of Junior Enterprise in Portugal; to represent the federated Junior Enterprises in a national and in an international level; to encourage and support the creation of new Junior Enterprises in Portugal; to participate in the training of Portuguese students; to cooperate with national and international organizations in order to develop Portuguese society and Portugal. Regarding its vision statement, it is "to make Portuguese Junior Enterprise Movement as one of the strongest of the world".

In what it concerns to the network of Portuguese federated Junior Enterprises, as it is possible to be seen in the Table 2, it has a great geographic coverage and provides consultancy services in very different areas, such as engineering, law, IT, human resources, marketing and management.

Table 2: Portuguese Junior Enterprises members of JADE Portugal

Junior Enterprise	University	City	Date of establishment	Services provided (areas of consultancy)
Aveiro Smart Business	Universidade de Aveiro	Aveiro	2008	Business support; branding; market studies
Católica Students' Corporation	Universidade Católica do Porto	Oporto	2011	People and talent; entrepreneurs; marketing and strategy, studies, law, events and operations
FEP Junior Consulting	Faculdade de Economia da Universidade do Porto	Oporto	1997	Management and strategy; marketing; finance and subsidy application
ISCTE Junior Consulting	ISCTE – Instituto Universitário de Lisboa	Lisbon	2010	Management and strategy; marketing; human resources management and finance
JEEFEUC	Faculdade de Economia da Universidade de Coimbra	Coimbra	2006	Marketing; human resources; finance; strategy; economic studies

JeKnowledge	Faculdade de Ciências e Tecnologias da Universidade de Coimbra	Coimbra	2008	Engineering; training; marketing and communication; design and multimedia;
JuniFEUP	Faculdade de Engenharia da Universidade do Porto	Oporto	2001	Engineering
JUNITEC	Instituto Superior Técnico	Lisbon	1990	Engineering
UTAD Solutions Consulting	Universidade de Trás-os-Montes e Alto Douro	Vila Real	2010	IT; management; marketing

(**Source:** Junior Enterprises' Websites, 2013)

1.3 The relevance of the present sector

The relevance of the present sector can be analyzed in two different perspectives: the relevance of the sector for potential members of Junior Enterprises and the relevance of the sector for potential clients.

With the increase of youth unemployment rate in the last years, the concept of youth entrepreneurship became more important and several studies about this theme were conducted. Therefore, and according to OECD's statistics (2013), youth entrepreneurship (that can also be seen as self-employment) in people aged between 15 and 24 years is a concept that has special relevance in Europe, especially when compared to countries from different continents such as USA and Canada (Appendix 2). Despite this, OECD (2013) also shows that "*businesses run by young entrepreneurs have lower survival rates than those of older entrepreneurs; however, young people's businesses that do survive have more growth potential than those of older entrepreneurs on average. (…) This suggests that young entrepreneurs are a high risk but high reward group of entrepreneurs*" (Appendix 3). These results show that it is important to give young people some type of training while their attendance to university' classes in order to decrease the failure rate in what it concerns to start-ups launched by young people.

So, the sector of Junior Enterprises, besides enabling greater success to young people when launching their own projects (because the students have the possibility to observe the direct consequences of any decision in a real company, but with lower impact on the final customer since there can be a direct contact with professors and partners with experience in the area), it also predicts better chances while applying to a job, as it is seen as an extracurricular activity

that allows the application of content knowledge (Ward & Yates, 2013). All of these reasons justify the importance of this sector for university students

In what it concerns to the relevance of the present sector for potential clients, meaning companies with interest in working with this kind of enterprises, it is important to start by explaining that the main service provided by Junior Enterprises is consulting. Based on this, we can conclude that the direct competitors of Junior Enterprises are the other Junior Enterprises that provide services in similar areas, because not only the services are similar but also because the competitive advantages are similar (such as the lower price, the access to younger workers with more creativity and the access to potential future employees). Regarding indirect competitors, they are the regular Consulting Firms, once the services provided can be quite similar, but the offer and the conditions can be really different.

Therefore, and in order to determine if the sector of Junior Enterprises could be relevant for other companies, it was conducted a trends' analysis. This was an analysis that studied the evolution of the interest in this concept across the years and that compared its results with the evolution of the interest in regular consulting companies (considered as indirect competitors). The software used to perform this analysis was "*google trends*", which is a web facility of Google that allows seeing what users have been searching for with Google and also how often a term is used over time.

As one can see through Appendix 4, since the year 2004 (year selected by default by this website) the users' interest across the world by the concepts of "consulting" and "consultant", despite slight oscillations, have been decreasing. However, when the concepts are "junior consulting", "junior consultant" and "junior enterprise", as it is in Appendix 5, we can see that there are oscillations but, in general terms, there is no clear increase or decrease in the interest of users. So, Junior Enterprises (often known as Junior Consultings) can use this in their advantage, meaning that they can start gradually using the fact that the interest in great consulting firms is decreasing and the fact that the number of corporate insolvencies have been increasing in Western Europe over the years (Appendix 6) as a way to sell their services.

Summing up, there seems to be enough space for the development of this sector and it seems to be an interesting sector to be studied and analyzed.

1.4 Literature review

1.4.1 Job embeddedness

For Mitchell et al (2001), Job Embeddedness can be described as being "*like a net or a web in which an individual can become stuck*". In order to clearly explain this definition, the authors define three critical aspects of Job Embeddedness: links, fit and sacrifice.

Regarding **"links"**, this concept refers to the extent to which people have links[1] to other people or activities and the way those links affect their willing to stay within the organization. This means that the higher the number of links between the person and the web, the stronger the bonding to the job and/or organization. As concluded through several studies, there is usually normative pressure from family and colleagues to stay on a job.

Concerning **"fit"**, it is defined as the employee's perceived compatibility with an organization and with the surrounding environment, which means that the individual's characteristics, values and objectives must be suitable with the organizational culture and strategy and also with the characteristics and requirements of the job. So, if there is a match, there is a greater possibility for the employee to feel tied to the organization.

Finally, **"sacrifice"** refers to "*the perceived cost of material or psychological benefits that may be forfeited by leaving a job*". So, the bigger the losses that would occur if the employee left the job, the greater the difficulty in quitting and abandoning the organization.

In other words, person–organization fit, links, and sacrifice contribute to Job Embeddedness, but Job Embeddedness does not cause fit, links, and sacrifice. Taken together, these elements exert force on workers to stay with their current employers.

While presenting the concept of Job Embeddedness, there were several similarities with the concept of "organizational commitment"[2] and it is necessary to state that both concepts are different and should not be wrongly applied, as explained in Mitchell et al (2001) paper.

[1] Links are characterized as "formal or informal connections between a person and institutions or other people" (Mitchell et al, 2001)

[2] For Steers (1977) organizational commitment can be defined as "*the relative strength of an individual's identification with and involvement in a particular organization*". Therefore, despite the fact that the three types of organizational commitment proposed by Allen and Meyer in 1990 (affective, continuance and normative commitment) have some similarities with "links", "fit" and "sacrifice", they are not the same, as shown in Mitchell et al (2001) paper.

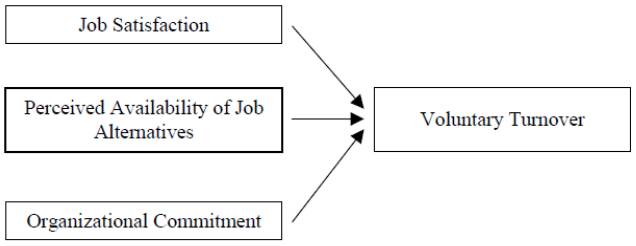
1.4.1.1 Relationship between job embeddedness and voluntary turnover

As it was possible to be concluded through the information presented before, the concept of Job Embeddedness is strictly related to the concept of voluntary turnover.

So, when studying the concept of voluntary turnover, it is possible to find several models that aim to explain it, but one model that proved to be very effective is the one that combines these three variables: Job Satisfaction, Organizational Commitment and Availability of Job Alternatives (Figure 1). However, Mitchell et al (2001) proposed a new model to analyze voluntary turnover, which includes the concept of Job Embeddedness and its three dimensions (Figure 2).

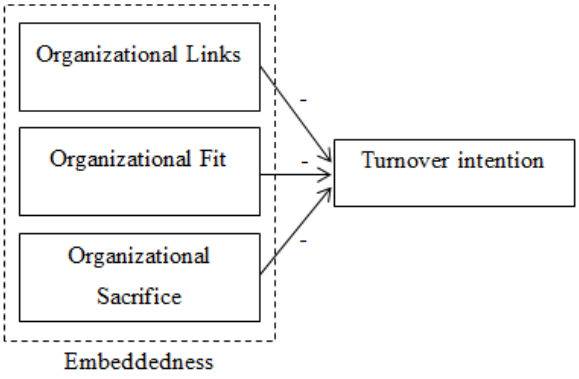
Based on both models, Besich (2006) conducted a study in order to assess which one would better predict voluntary turnover, if the Traditional model or the Embeddedness model. So, the conclusion was that it should be used the traditional turnover-related construct but also incorporate the dimensions of Job Embeddedness, because it was proved by the author that there is a correlation between the dimensions of Job Embeddedness and the turnover intention.

Figure 1: Traditional Model of Voluntary Turnover



(**Source:** Besich, 2005)

Figure 2: Dimensions of the Embeddedness Model of Voluntary Turnover



(**Source:** Besich, 2005)

Besides Besich's study, there were other authors that also concluded to be a relation between job embeddedness and turnover.

For example, Mitchell *et al* (2001) concluded that Job Embeddedness is negatively related to turnover, which means that "*people who are embedded in their jobs have less intent to leave and do not leave as readily as those who are not embedded*". Besides these authors, Lee *et al* (2004) reached the conclusion that "*off-the-job*[3] *embeddedness predicted turnover and absences, whereas on-the-job embeddedness did not; in contrast, on-the-job embeddedness predicted organizational citizenship and job performance, whereas off-the-job embeddedness did not; the two components of job embeddedness may be processes through which the decisions to perform and to participate can be conceptually and empirically linked*".

Khattak *et al* (2012) also stated that HRM practices (such as training, compensation, career planning, performance appraisal and supervisor support) and Job Embeddedness "*can decrease the turnover and also increase the performance and satisfaction level of the employees which automatically decrease the financial burden of the organization that occurs on the recruitment and selection, training and development, etc.*".

1.4.1.2 Job embeddedness and innovation related behaviors

Across the years, while the concept of turnover was being studied, it was argued that a low level of turnover would be harmful for the organizations that aimed a high level of innovation. This was stated because there was a belief that a small turnover rate meant that there was little job vacancies available for new employees, who would bring new ideas, and also that the employees that were in the company for a long time, would be more resistant to change.

However, Ng and Feldman (2012) conducted a study that intended to prove that all of these assumptions were wrong and incorrect.

In what it concerns to innovation related behaviors, which are important for improving organizational productivity and for helping companies to rapidly adapt to context changes, employees can contribute to innovation in organizations in, mainly, three different ways: **generating** new ideas; **sharing** ideas with colleagues and supervisors and spreading innovation throughout organization; and working to **implement** those innovations or helping

[3] "Off-the-job embeddedness" refers to forces in employees' personal lives and communities that keep them stable, while "on-the-job embeddedness" refers to forces in the workplace that keep employees tethered to their positions (Ng & Feldman, 2010)

others to do that. So, when an employee feel tied to an organization (high Job Embeddedness), he is particularly motivated to create, spread and implement innovation on the organization's behalf.

Therefore, based on the three dimensions of Job Embeddedness, links, fit and sacrifice already presented, the authors suggests the following:

- Highly embedded employees are more likely to perform well because of the favorable feelings they have about the employment relationship (fit)
- Highly embedded employees are more likely to perform well because of the obligations they feel as a result of social ties (links)
- Highly embedded employees are motivated to perform well because of their strong desire to keep their jobs and ensure that the rewards associated with their current jobs continue into the future (sacrifice)

This study showed that the size and strength of the effect of Job Embeddedness on innovation-related behavior depend on the kinds of innovation behaviors investigated. This means that when the subject is to spread innovation and implement innovation, Job Embeddedness is positively related. However, when the subject is to create ideas, there is no correlation with Job Embeddedness.

1.4.2 Work-Life Balance

The relationship between employees' work and nonwork lives has been studied in the last years by several researchers and this relationship plays an important role in the study of organizational behavior and human resources practices and policies. While studying these topics, the concept of "work-family conflict (WFC)" arose.

Therefore, according to Greenhaus & Beutell (1985) work-family conflict, can be defined as "*a form of interrole conflict*[4] *in which the role pressures from the work and family domains are mutually incompatible in some respect*", which means that the participation in the work role makes the participation in the family role much more difficult (and vice-versa).

[4] A type of conflict that appears when the pressures of participation in one role are incompatible with the pressures of participation in another role (Greenhaus & Beutell, 1985)

1.4.2.1 Sources of Work-Family Conflict

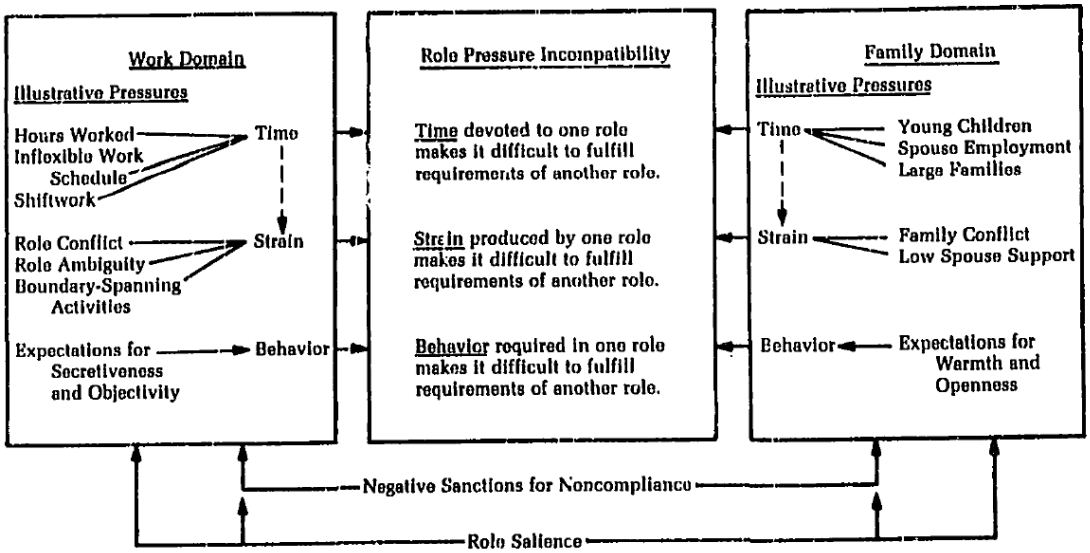
Based on Greenhaus & Beutell (1985) methodology, as shown in Figure 3, there are three types of Conflict: time-based conflict; strain-based conflict; and behavior-based conflict.

Regarding **time-based conflict**, it translates in the fact that the engagement in one role makes it physically impossible to fulfill the requirements and expectations that arise from the performance of the other role. Besides this, the pressures that are associated with one of the roles can produce a preoccupation that harms the performance within the other role. Therefore, the sources of time-based conflict can be the number of hours worked per week (positively related with WFC); the amount and frequency of overtime; the presence and irregularity of shiftwork; and also the inflexibility of the work schedule.

Strain-based conflict occurs when strain symptoms in one of the roles, such as tension, anxiety, fatigue, depression, apathy and irritability, affects the individual's performance on the other role, by making it difficult to comply with its demands. Regarding the main sources of this type of conflict, there can be sources of two types. In what it refers to the work domain, the sources can be positively related to WFC, such as the ambiguity within the work role, low levels of leader support and interaction facilitation, but also negatively related as it is the case of low levels of task challenge, variety and importance. Regarding the family domain, the majority of the studies emphasize the support of spouses or the demands of children (Cinamon, 2006; Heywood, Siebert & Wei, 2010), which does not happen in the case of Junior Entrepreneurs.

Finally, the **behavior-based conflict** refers to the conflict that exists when the pattern of behavior expected in one of the roles is incompatible with the behavior expected on the performance of the other role. One example of this type of conflict is that, as shown by Schein's study in 1973 (cited by Greenhaus & Beutell, 1985), in an entrepreneur context it is expected emotional stability, aggressiveness and objectivity, while in a familiar level it is expected a behavior more emotional and vulnerable.

Figure 3: Sources of Work-Family Conflict (WFC)



(**Source:** Greenhaus & Beutell, 1985)

1.4.2.2 Work-Life Balance

As it was reflected in the previous studies presented, Work-Family Conflict can have negative consequences for the individual performance but also for the organizational performance. Therefore, it is important to study a concept that guarantees equilibrium between both roles of an individual's life: the professional and the personal ones.

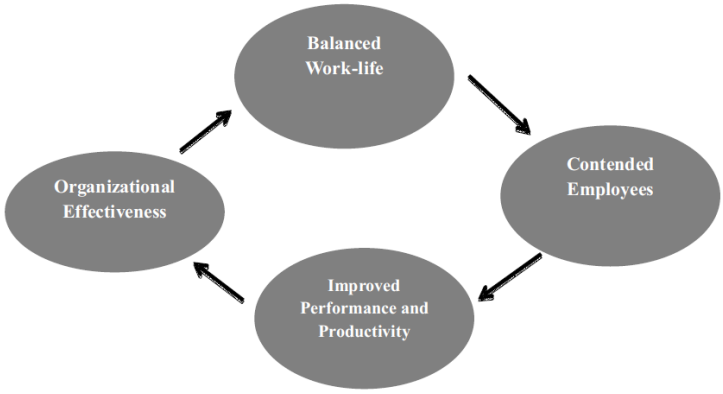
For Heywood *et al* (2010) Work-Life Balance is characterized as "*workers' assessment of available time to attend to family responsibilities*" assuming that employees feel firms provide this time according to two stages: first, if the firm committed (implicitly or explicitly) to provide this time and second, if the firm kept its commitment if made.

Still regarding WLB, for Kumar & Chakraborty (2013) WLB guarantees a simultaneous achievement of work milestones while promoting the enjoyment in personal and social life and it has a great impact on the organizational performance, since "*consequences of good WLB benefit the organization in a variety of ways as improved performance, increased productivity, augmented employee satisfaction and happiness, sound wellbeing, enhanced organizational image, improved employee retention, improved quality of life and so on. Likewise, the consequences of poor WLB can be low level of morale and motivation, increased number of grievances, work-family conflict, poor wellbeing, low-employee retention, low performance and productivity level, poor organizational image, poor quality of work life, poor quality of life and so on*".

So, WLB and organizational efficacy are interrelated and interdependent, which means that when a balance between work and family roles occur, it leads to contended employees and, consequently, to improved performance and productivity and organizational effectiveness, as shown in Figure 4.

These same topics are translated in numbers and results, namely through a study conducted by the Corporate Executive Board that concludes that employees who feel a greater WLB tend to work 21% harder than the ones who do not feel the same thing. Therefore, companies have a lot to win in promoting WLB among their employees, once the individual's results are positively affected by a healthy WLB.

Figure 4: Virtuous Cycle of WLB



(**Source:** Kumar & Chakraborty, 2013)

However, concerning the development and application of WLB policies, the results of Ueda (2012) show that if supervisors have a positive perception of WLB policy, the acceptance of their subordinates' requests are positively influenced. Also, the probability for employees with higher performance to have a favorable treatment from their managers is higher.

Despite this, as seen, the results of WLB Programs are not always that positive and according to Sánchez-Vidal et al (2012), one of the reasons might be the "*perception gap between managers and employees regarding WLB availability of practices*". This gap can be explained by several factors, such as: WLB practices are not offered to all employees; managers do not agree or support the implementation of WLB practices (they implement them only because they suffer pressure to do so, but they do not want their employees to use it); the employers implement such practices but they are not correctly communicated to the company and the workers do not know that they exist. All of these factors show that employers must be aware

of how employees perceive WLB practices because they can influence all of the organizational outcomes that were referred previously.

1.4.2.3 Work-Life Balance Programs and High Performance Work Systems

For Wang and Verma (2012), one of the potential mechanisms through which business strategy can impact on the organization decision to implement Work-Life Balance Programs (WLBP) may be the High-Performance Work Systems (HPWS) which encourage employees to be a be part of the decision-making and also to develop their skills and improve their performance. However, HPWS's demand employees' initiative and involvement in the job they are performing, which can be achieved through the implementation of WLBP.

Therefore, HPWS intend to improve organizational performance, through employees' participation and initiative, once they give suggestions of improvements and draw solutions according to what are their perspective and vision. This means that HPWS can only be successful if employees' involvement exists, which can be achieved through the implementation of WLBP.

1.4.3 Motivation

One of the greatest concerns (and challenges) of managers is that their employees must be performing at their best, which means that they must be doing their best work in order to promote organizational effectiveness.

Therefore, there were innumerous studies about a concept that got great attention from the researchers: employee motivation. For example, Bartol and Martin described motivation, in 1998, as "*power that strengthens behavior, and triggers the tendency to continue*" (Farhad et al, 2011; Manzoor, 2011).

Still in this same topic, for Jones (1959), cited by Lawler III *et al* (1969), motivation theory, attempts to explain "*how behavior gets started, is energized, is sustained, is directed, is stopped and what kind of subjective reaction is present in the organism*".

Foss *et al* (2009) propose three types of motivation, based on other researchers' studies: external and intrinsic motivation and introjection. External motivation is related to the individual's engagement in an activity, in order to achieve a positive or to avoid a negative external outcome, while intrinsic motivation is related to the execution of an activity because

it is in accord with the individual's intrinsic and personal values. So, this means that "*an intrinsically motivated individual is mainly absorbed in the process of doing an activity, whereas an externally motivated individual is concerned with the external outcome attained from doing the activity*". Regarding introjection, this occurs when an individual's behaviors according to a certain regulation but does not accept or recognize it as his or her one.

So, according to Nohria *et al* (2008), there are four independent drivers of employee motivation: the drive to acquire, the drive to bond, the drive to comprehend and the drive to defend (Appendix 7). So, to fully motivate employees, the four of them must be fulfilled.

In what it concerns to the **drive to acquire**, it is related to the fact that all individuals are driven to acquire scarce goods that impact their sense of well-being, which means that one feel delight when this drive is attained and discontent when it is not. However, this drive is relative, because people always compare what they have with what others have, and insatiable, because people always want more. This drive can be attained through the implementation of a Reward System, which ties performance to rewards.

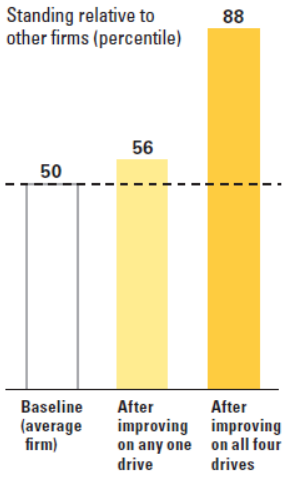
Regarding the **drive to bond**, refers to the connection that an individual establishes with other individuals but also organizations, and it is associated with strong positive emotions when it is met (and negative ones, when it is not met). Therefore, when employees feel a bond with the organization, it enables an increase of motivation. So that this drive is fulfilled, an adequate organizational culture should be addressed and implemented.

Drive to comprehend mentions that people have a great need to formulate theories, to understand the surrounding and to suggest reasonable actions and responses. This translates in the fact that employees are more motivated by those jobs that allow challenge, growth and learning, instead of those that are monotonous. The way to promote the fulfillment of this drive is through job design, a concept that will be presented afterwards.

Finally, **drive to defend** is related to the fact that individuals tend to defend their beliefs, ideas, family and friends of external threats and it is connected to individuals' resistance to change.

So, fulfilling this drive enables a sense of confidence and security, while not fulfilling it creates emotions such as fear and resentment.

Figure 5: Results of improvement of drives



Source: Nohria et al (2008)

This can be achieved through performance-management and resource-allocation processes.

With this study, Nohria et al (2008) concluded that the improvement in only one of the drivers (in this case, job design) would move the company from the 50th percentile to a 56th percentile. However, if all four drives are improved, the company moves to an 88th percentile (Figure 5). Besides this, more evidences on what is the relationship between motivation and organizational effectiveness and performance, are described in the next topic.

1.4.3.1 Employees' motivation and organizational effectiveness

As it was seen, motivation is important in what it concerns to an individual level, but also, to an organizational level. Therefore it is important to study what type of impact this concept may have in terms of the organization's results, which means that organizational performance and effectiveness should be study.

For Mazoor (2011), based on Muhammad *et al*'s work in 2011, organizational effectiveness can be defined as "*the notion of how effectual an organization is in accomplishing the results the organization aims to generate*". So, in order to relate organizational effectiveness with employees' motivation, this same author proposed a new motivational model, that is different from the several others and that aim to understand which factors increase motivation and how, in fact, motivation is related to effectiveness. The main conclusions were that recognition and empowerment play an important role in what it concern to the increase of employees motivation, which means that appreciating employees for what they do and allowing them to participate in the decision making process, will motivate them towards the accomplishment of tasks and, therefore, improve organizational results.

1.4.3.2 Motivation and Job Design

There were several studies conducted that highlighted a concept that it was thought to have great importance and impact in employees' motivation, and it is the concept of Job Design.

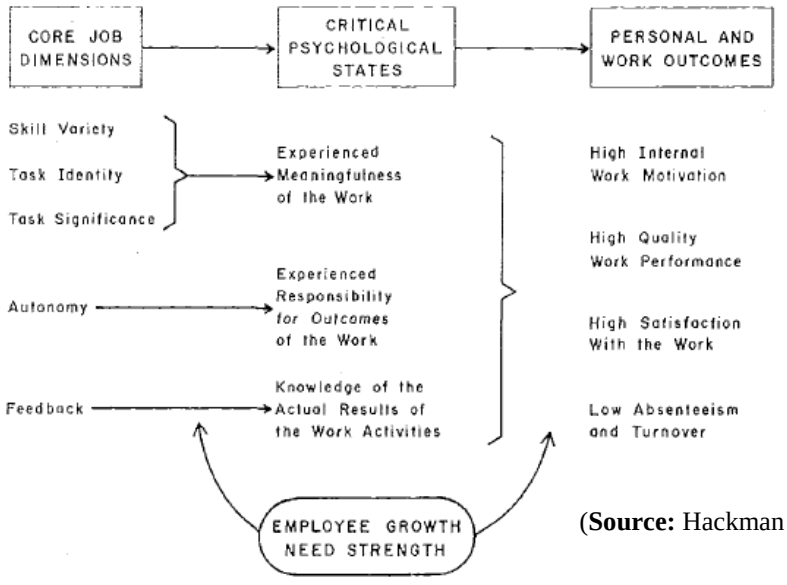
So, Job Design, according to Foss *et al* (2009) is an HRM fundamental activity that is related to the decision of the job structure, which is acknowledge through the identification of relevant tasks and activities and its distribution between employees, in a way that is beneficial for both the organization and the individuals, creating advantageous synergies.

According to Hackman & Oldham's (1975) research, "*personal and work outcomes (high internal motivation, high work satisfaction, high quality performance and low absenteeism and turnover) are obtained when three 'critical psychological states' are present for a given employee (experienced meaningfulness of the work, experienced responsibility for the outcomes of the work and knowledge of the results of the work activities)*". Therefore, these 'critical psychological states' are accomplished through five core dimensions, which are: skill variety, task identity, task significance, autonomy and feedback (the first three dimensions are related to the experienced meaningfulness of the work; the fourth is related to experienced responsibility for the outcomes of the work and the last one is related to the knowledge of results). So, combining all of these indicators, an equation of Motivating Potential Score (MPS), which gives a summary score of the overall motivating potential of a job, was created:

$$MPS = \left[\frac{Skill\ Variety + Task\ Identity + Task\ Significance}{3}\right] \times (Autonomy) \times (Feedback) \qquad \textbf{(1)}$$

Based on these five indicators, on the MPS and on the theory described in Figure 6, the authors developed the Job Diagnostic Survey (presented in the topic 2.3).

Figure 6: A theoretical model relating core job dimensions, critical psychological states and on-the-job outcomes



(**Source:** Hackman & Oldham, 1975)

It is now important to present each job dimension, so that the difference a definition of each one is clear for the investigation.

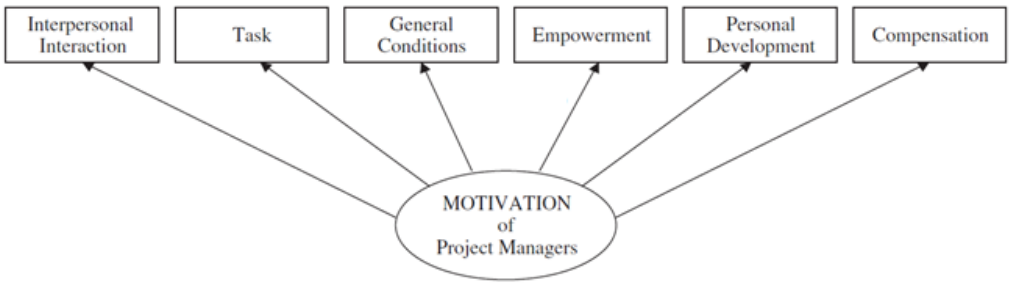
Regarding **skill variety**, it refers to "*the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the employee*"; **task identity** can be defined as "*the degree to which the job requires completion of a "whole" and identifiable piece of work—that is, doing a job from beginning to end with a visible outcome*"; concerning **task significance**, it is "*the degree to which the job has a substantial impact on the lives or work of other people—whether in the immediate organization or in the external environment*". After presenting the three dimensions that conduct to experienced meaningfulness of the work, it is going to be presented the two remaining. So, **autonomy** is "*the degree to which the job provides substantial freedom, independence, and discretion to the employee in scheduling the work and in determining the procedures to be used in carrying it out*", while **feedback** can derive from the job itself or from agents, and it refers to the degree through which the employee obtains direct and clear information about the effectiveness of his performance.

1.4.3.3 Motivation of project teams' members

As it was possible to be seen through previous information, it has been a great focus on the study of the factors that motivate workers the most, since their motivation will enhance organization levels of productivity and effectiveness. However, there were few studies about these motivating factors, applied to project teams' members and project managers. So, Seiler *et al* (2012) based on previous researches proposed a model of organizational, work related factors which impact on the motivation of project managers.

This model, Motivational Factor Inventory (MFI), which is represented in Figure 7, defines six dimensions that are capable of motivating project members: interpersonal interaction; task; general working conditions; empowerment; personal development; and compensation.

Figure 7: Integrated model of motivational dimensions of the Motivational Factor Inventory



(**Source:** Seiler *et al*, 2012)

Explaining this model, it starts by referring that having positive **interpersonal interactions** with others motivates project managers, once they must be able to balance the different interests of other employees, who can be their superior or other team's members. Besides this, other motivational factor can be the **task**, meaning that if the task is seen as relevant and interesting (allowing the individual to use his own skills or abilities and to set clear goals), it can positively impact on project managers' motivation.

In what it concerns to **general working conditions**, it refers to several factors, such as the individual having access to the necessary resources, to an adequate working environment, to job security and to appropriate organizational processes, rules and policies.

Empowerment is pointed as one of the biggest motivators of project managers, and refers to the fact that they are given the possibility to influence, make decisions and exercise leadership. Regarding **personal development**, studies have proved that if the teams' members have the opportunity to learn though the performance of their tasks, they have tendency to feel more motivated with work.

Finally, **compensation** refers to both materialistic and non-materialistic rewards, once evidence has showed that a certain degree of compensation is seen as important for project members because it gives them a sense of recognition.

So, after an analysis of these six dimensions of MFI by the same authors, it has been concluded that the most important dimension for job motivation is the "task", followed by "interpersonal interaction", "empowerment", "personal development", "general decisions" and "compensations", respectively. However, it is important to state that this study was applied in Switzerland and, therefore, the extrapolation for all population may not be as accurate as the one for Swiss population.

1.4.4 Satisfaction

Other concept that has been studied in great depth in the last few years by several authors is the concept of Job Satisfaction.

So, job satisfaction can be defined as "*the extent to which the employees of a firm feel that their interests are being looked after by the management*" (Jyoti & Sharma, 2012) or as "*an attitudinal variable that reflects the degree to which people like their jobs and is positively related to employee health and job performance*" (Spector, 1997, cited by Miryala &

Thangella, 2013). Therefore, and according to Freeman (1978), job satisfaction contain useful information that may help to predict and understand behavior and it may also lead to complexity due to its dependency on psychological states.

Based on this, Franek and Vecera (2008) stated that there are three models of job satisfaction: situational, dispositional and interactional. So, the **situational model** refers that the individuals' satisfaction depends on the job characteristics, assuming that all people have similar needs, which are satisfied by similar job characteristics.

Regarding **dispositional model**, it says that regardless the characteristics of the job or the situation, employee satisfaction is affected by a certain set of stable individual's characteristics. One of the studies conducted about this model concluded that there are four core self-evaluations that determine the individual's disposition towards job satisfaction: self-esteem, general self-efficacy, locus of control and neuroticism. So, the first two are positively correlated with job satisfaction (which means that higher levels of self-esteem or self-efficacy predict higher levels of job satisfaction), the third indicates that internal locus of control leads to high levels of job satisfaction, and the fourth is negatively correlated with job satisfaction (which means that lower levels of neuroticism predict higher levels of job satisfaction).

The last one, the **interactional model**, defends that what affect job satisfaction are neither the job's characteristics nor the employee's characteristics but the fit between both of them, which means the fit between the person and the environment.

Regarding empirical data about job satisfaction, the International Social Survey Programme (2005), presented by OECD, considered that the basic indicator of work satisfaction is the following: "*the share of all employees reporting that they felt 'completely', 'very' or 'fairly' satisfied in their main job (out of seven response category)*". Based on this, the main conclusions of this study, as it can be seen in the Appendix 8, were that most people within the OECD's countries were satisfied, because the share of people reporting to be completely, very or fairly satisfied with their jobs was close to 80% (with Portugal in the 16th place). Besides this, it was also possible to conclude that there has been an increase in the employees' satisfaction in the majority of these countries, between 1997 and 2005 and that there is no significant difference in job satisfaction by gender or age.

1.4.4.1 Personality and Job satisfaction

There were several studies that aimed to understand the relationship between individuals' characteristics and job satisfaction. One of these studies was conducted by Judge *et al* (2000) and is based in the relationship between the four core self-evaluations presented by dispositional models and job satisfaction. Its main conclusions were that these self-evaluations were related to job satisfaction over time and also that job complexity acts as an important explanatory variable between these two concepts.

However, one of the best known personality models is the Big Five Factor Structure, a methodology developed by Golberg in 1990, which refers that personality can be described according to five main traits: neuroticism, openness to experience, conscientiousness, agreeableness and extroversion.

So, some researchers, namely Judge *et al* in 2002 (cited by Franek and Vecera, 2008), reached the conclusions that neuroticism was negatively correlated with job satisfaction, while conscientiousness, extraversion and agreeableness were positively correlated. Besides this, he also concluded that openness to experience had a negligible impact on job satisfaction.

1.4.4.2 Organizational Culture and Job Satisfaction

Since the 1980's there has been a growth on the interest by the concept of organizational culture, which can be characterized as the set of values and behaviors that contribute to the distinctive environment of each organization, meaning that organizational culture is a mean to guide individual and collective choices of the employee at work (Câmara *et* al, 1997). Therefore, since organizational culture is something that impacts directly on the employees' behaviors, it is important to study the relationship that exists between it and job satisfaction.

So, the framework of Cameron and Freeman in 1991 (cited by Lund, 2003), states that there are two axis, one that refers to continuum from organic to mechanistic processes, and another that refers to the internal maintenance to external positioning; and that this translates in four types of organizational culture: clan, adhocracy, hierarchy and market, as it can be seen through the Appendix 9.

Therefore, Lund (2003) conducted a study in order to understand which is the relationship between each of these four types of organizational culture and job satisfaction. The results of this study showed that:

- "*both clan culture (characterized by its emphasis on mentoring, loyalty, and tradition) and adhocracy culture (characterized by its emphasis on innovation, entrepreneurship and flexibility) elicited significantly higher levels of employee job satisfaction than market culture (characterized by its emphasis on competition, goal achievement and market superiority) and hierarchy culture (characterized by its emphasis on bureaucratic order, rules and regulation, and predictability)*";
- "*while overall job satisfaction in clan and adhocracy organizational culture types is higher than overall job satisfaction in market and hierarchy cultures, it does not imply that employee performance will be correspondingly higher in adhocracy and clan cultures than in market and hierarchy cultures*";

Concluding, this study mirrors the importance of retaining and developing a loyal workforce, which can be acknowledged through the build of cohesion, teamwork and loyalty, while encouraging entrepreneurship and innovation. However, it is important to state that there is not a correct type of organizational culture, once the adequate type of culture depends on several factors, such as the sector in which the company is working and the job characteristics.

1.4.4.3 Impact of job satisfaction on relevant variables, such as turnover, absenteeism and performance

Yücel's empirical study about job satisfaction, in 2012 concluded that high levels of job satisfaction impacts positively on employees' commitment and also predict low levels of turnover intentions.

On the other hand, Feldman and Arnold's research, in 1983, concluded the impact of job satisfaction in, mainly, three different variables: performance, turnover and absenteeism.

Regarding performance, the main conclusion of this research was that it is not job satisfaction that leads to job performance but the other way around (contradicting the idea "the happy worker is the productive worker"). This means that a good performance results in intrinsic rewards for the employee, who will feel pleased and, therefore, satisfied.

Concerning turnover, the authors reached the following conclusion: dissatisfied employees are more likely to leave their jobs permanently, meaning that job satisfaction's level is negatively

correlated with turnover intentions. Therefore, organizational units with the lowest average satisfaction levels tend to have the highest turnover rates.

In relation to absenteeism, it was possible to conclude that it is also negatively related to job satisfaction's level. So, dissatisfied employees are more likely to be absent from work more often. On the other side, the employees who are more satisfied with their jobs, are most likely to exert the high level of effort necessary to get to work.

1.5 Objectives and research model

The study of this very specific sector, which is still growing and being developed, will enable the analysis of several variables related with organizational behavior in a specific context. This means that this paper aims to analyze what are the main variables that predict the performance and behavior of a Junior Entrepreneur, which will allow to conclude about what are their main reasons for remaining in JE's.

In order to achieve these generic objectives, a more specific analysis in what it concerns to job embededdness, work-life balance, motivation and satisfaction were conducted. Therefore, it becomes important to understand if these variables relate with each other as presented in the literature review, mainly due to the fact that the context in a Junior Enterprise is quite different from the context of a "common" enterprise.

Besides this, it also pretends to be a contribution for the development of the Junior Enterprise Movement across the world, through the study of variables that impact in members' performance, which will enable an improvement of the human resources practices and, consequently, the organizational performance.

1.5.1 Research Hypotheses

The research hypotheses, which were defined, based on the literature review and conclusions of several other authors, presented previously, are summarized in Table 3.

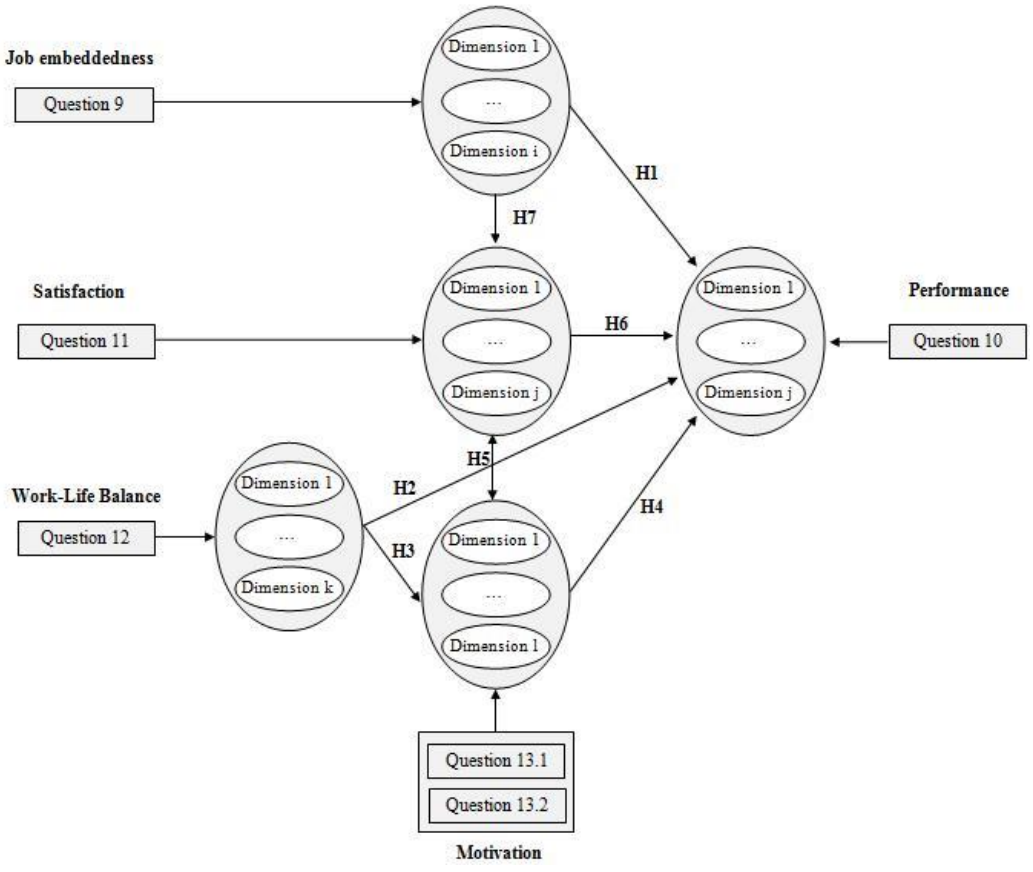
Table 3: Investigation Hypotheses

Hypothesis	Reference
H1: Job embeddedness influences positively the performance	Lee et al (2004); Khattak et al (2012)
H2: Work-Life Balance influences positively the performance	Kumar & Chakraborty (2013)
H3: Work-Life Balance influences positively the motivation	Kumar & Chakraborty (2013)
H4: Motivation influences positively the performance	Mazoor (2011); Hackman & Oldham (1975)
H5: Motivation influences positively the satisfaction	Hackman & Oldham (1975)
H6: Satisfaction influences positively the performance	Feldman & Arnold (1983)
H7: Job Embeddedness influences positively the satisfaction	Khattak et al (2012)

1.5.2 Research Model

In order to ease the understanding and reading of this study, the Figure 8 was elaborated. It summarizes the investigation that was conducted, as well as the research hypotheses that were defined.

Figure 8: Research Model



2 Methodology

In order to collect relevant information that is crucial for the hypothesis testing and for the achievement of the objectives that were proposed at the beginning, it is important to start by defining the research design of the research that was conducted. According to Emory (1980), research design is "*the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The research design constitutes the blueprint for the collection, measurement, and analysis of data*". Based on Bryman's (2008) methodologies of research design, this study has a cross-sectional design, because it assumes the collection of data on more than one case at a single point in time, in order to collect a body of quantitative or quantifiable data in connection with two or more variables.

After defining the research design of the study and what is intended to be studied, it is important to analyze how the data will be collected and analyzed, and also who will be the respondents. This information will be provided in the next topics.

2.1 Data collection and sources

The information contained in this paper was collected through several different sources, such as document analysis, observation, interviews and surveys.

Therefore, in what it concerns to document analysis, several sources were used, as it is the case of scientific articles, books, reports made by certified entities and relevant websites. Most of the information collected using this type of references is contained in the literature review topic. These sources of secondary data collection have higher reliability than the ones of primary data, as suggested by Churchil (1987) with the following sentence "*Do not bypass secondary data. Begin with secondary data, and only when the secondary data are exhausted or show diminishing returns, proceed to primary data*" (cited by Ghauri, Grønhaug & Kristianslund, 1995).

However, and because secondary data in not enough, other relevant source for data collection was direct observation, through direct contact with a specific Junior Enterprise (ISCTE Junior Consulting) during three years, but also through the attendance to several Junior Entrepreneurs' events organized by JADE and Portuguese JE's. This source of data collection allowed a collection of first-hand information in a natural setting, as well as the capture of the

dynamics of social behavior in a way that is not possible through questionnaires or interviews (Ghauri, Grønhaug & Kristianslund, 1995), such as the human resources practices and other studied variables such as work-life balance.

Other data collection source was structured interview to Pedro Lourenço, former International Manager and current Vice-President of JADE Portugal (Appendix 10) and to Eloísa Ferreira, current International Manager of JADE Portugal (Appendix 11). These interviews aimed to get more accurate information regarding the topic of the characterization of the sector.

Finally, the last source for data collection used was a quantitative web-based survey (Appendix 12), which, according to Bethlehem and Biffignandi (2012), "*is an attractive means of data collection because it offers a possibility of collecting a large amount of data in a short period of time at a low cost*". Besides these advantages, the analysis of results is also faster because the answers are automatically inserted on the computer and it enables to reach a higher number of people, even though if they are geographically dispersed, as it is the case of the studied sample. However, web-based surveys present some disadvantages as well, such as the fact that it is easier for the respondents to quit and also because not everybody has access to internet (Malhotra, 2007).

So, the survey was conducted online, through Google Docs, which is a free and reliable platform that converts the answers into an excel file, during 15 days (from May 10th to May 25th, 2013).

2.2 Population and sampling

According to Hill and Hill (2005), population or universe is the researcher target, which means the total set of "entities" whose answers are data that is relevant for the study. So, the population of this investigation is the total of students that are (or was in the past) part of the Junior Enterprise Movement. However, most of the times it is not possible to analyze all the universe due to lack of time or resources and the researcher define a sample and extrapolate the conclusions to the generality of the population. So that the conclusions reached through the analysis can be extrapolated for the entire universe, the sample must be representative of the population, which means that the sample must be very similar in terms of characteristics that are relevant for the study. In this case, the common characteristic among all the members

that are part of the sample are the fact that they are or were member of a Portuguese Junior Enterprise.

According to the same authors, there are two types of Universe: Targeted Universe and Questioned Universe. In this specific case, the targeted universe is the total of Junior Entrepreneurs worldwide and the questioned universe is the total of Portuguese Junior Entrepreneurs, since this is the first study regarding this theme and it was conducted in a moment when the directors and teams of JE's were changing (it was the end of the academic year), which makes the contact with other European JE's through the support of JADE Europe more difficult. However, the author intends to apply this study as a starting point for the study of European Junior Enterprises and in a posterior moment, to Junior Enterprises Worldwide. So, the targeted universe has about 22.000 cases (according to Pedro Lourenço, Vice President of JADE Portugal) while inquired universe, according to Appendix 13, has about 191 cases.

Based on Malhotra's (2007) typologies of sampling techniques, nonprobabilistic sampling "relies on the personal judgment of the researcher rather than chance to select sample elements" while in probabilistic sampling "sampling units are selected by chance". Therefore, the sample selection had two phases. In a first phase, the selection of respondents was made by convenience (nonprobabilistic technique), which means that the elements of the sample were chosen because "they happened to be in the right place at the right time" which, in this case, can be translated in the fact that they are Portuguese. In a second phase, the sample was selected through a probabilistic technique, once the questionnaire was available for all the members of all Portuguese Junior Enterprises in the same way (three ways were used: all JE's received an email and publicized the questionnaire among its Junior Entrepreneurs; the survey was posted in groups of social networks that are exclusive for Junior Entrepreneurs; and also through friends that know more people within the target). In this last phase, all the members of the population have the same probability to answer to this survey, since they all see this information in the same way. However, it is important to notice that the fact that the technique used was a non-probabilistic one will make the extrapolation of results for the entire population impossible.

When it comes to the minimum numbers of elements to be included in the study (or sample size), it was estimated according with the Law of Big Numbers, which translates in a minimum of 30 respondents to ensure the approaching of the normal distributions.

The web-based survey had a total of 109 valid answers, which is consistent with the information displayed previously. From those, 94 (84%) were current members of Junior Enterprises and 18 (16%) were alumni, as it will be described later in the results' analysis.

2.3 Instrument construction, scales and research variables

As stated previously, the main research method used in this study was the web-based survey. Therefore, this survey (Appendix 12) was written in Portuguese, since it would be applied to Portuguese population only, as explained previously. At the beginning, the respondents were informed about the objectives and context of the study, as well as the anonymity of the answers and confidentiality in the data analysis.

In the first question, the respondents had a filter question which enabled the researcher to filter out all the respondents that were not suitable for this investigation, as recommended by Malhotra (2007). This was a nominal scale, in which the responded should indicate if he/she has (or had, in the past) any connection with Junior Enterprises, and if the responded indicated that he was not part of the target population, then the survey would finish for him/her.

So, the first block of questions will not be used for inductive statistics but only for descriptive statistics, once they will mainly be useful for the characterization of the sample, using variables such as: gender, sex, the role at the JE and the participation on the founding of the JE.

The second block of questions is related to "job embeddedness and integration" and it was taken from the measure designed by Crossley *et al* (2007). It is composed by seven questions, in which the answers were scored from 1 to 5, where 1 refers to "strongly disagree" and 5 to "strongly agree".

The third block of questions, which relates to organizational performance, was developed by Ferreira, A. and it analyzes the quantity, quality and contribution of the individual performance for the organizational performance. The score of the 4 questions were the same one from the previous block (from 1 to 5, where 1 refers to "strongly disagree" and 5 to "strongly agree").

The fourth block is regarding to job satisfaction and it is composed by four questions. This scale was also scored from 1 to 5 (1 = "strongly disagree" and 5 = "strongly agree").

The fifth block was composed by 10 questions and it refers to "work-life balance". These questions and scale were adapted from Netemeyer *et al* (1996) and they analyze two different dimensions regarding these theme: work-family conflict and family-work conflict, which were both explained in the literature review. The answers were scored according to five options that went from 1 to 5, being 1 correspondent to "strongly disagree" and 5 to "strongly agree".

Finally, the last block is related to job design and motivation, enabling the calculation of Motivating Potential Score (MPS). So, this block is constituted by two sections, which derive from Hackman and Oldham (1975) study. The first section is scored from 1 to 7 (being 1 equals to "very little" and 7 equals to "very much"), while the second section is scored from 1 to 7 (being 1 equals to "very inaccurate" and 7 equals to "very accurate"). This block assesses the five dimensions that were presented in the literature review: skill variety, task identity, task significance, feedback and autonomy.

In the total, the survey had 15 mandatory questions (most of them with several lines of response) and, from those 15 questions, 4 were open questions (the ones from the first block that asked about the reasons for application and also the reasons for the permanence, the age and the seniority in the JE); and 11 were closed questions (5 were nominal and 6 were ordinal). So, the majority of the questions were closed because, besides being less tiresome for the respondents, it also makes easier to apply statistical analysis, as stated by Hill and Hill (2005).

In order to guarantee a greater adequacy of the questions and a good perception of the questions (once they were all translated from English to Portuguese, and there could have been errors in the translation), a pre-test was applied, under the same conditions, to a part of the intended sample, selected through convenience (applied to the members of one specific Junior Enterprise: ISCTE Junior Consulting), which enabled some small corrections before the application of the final survey.

2.4 Data analysis

Regarding the data analysis procedures, as previously stated, the software used for data collection exports automatically the answers into an excel spreadsheet. After that, all data

were transferred to SPSS 19, in order to statistical analyze it and reach some conclusions about the investigation hypothesis.

In the first block of the questionnaire (from question 0 to question 8) it was applied, mainly, descriptive statistics, in order to characterize the sample, in socio-demographic terms and in membership terms. Therefore, it was used frequency tables, crosstables and graphics (mainly pie charts).

Besides this, the first part of the data analysis consisted in analyzing the latent variables, which means that the author analyzed each of the 5 main variables in terms of their internal factors. In order to obtain such results, it was performed a Factor Analysis for each one, after understanding which was its internal consistency (through Cronbach's Alpha) and Multicollinearity (through Kaiser-Meyer Olkin's measure).

After this analysis, in order to test the hypotheses from the research model, several multiple linear regression models were constructed, as well as simple linear regression models. In order to analyze them, Durbin-Watson's test was conducted (in order to test the correlation between the random errors), as well as ANOVA (in order to test the validity of the model). Besides this an analysis to the mediator effect was also performed, through the analysis of other MLRM and SLRM.

The distributions were considered normal in all needed situations, not only by application of Central Limit Theorem, which assumes normal distribution when $n > 30$, but also by the application of the Kolmogorov-Smirnov, as it can be seen in further analysis and appendixes.

The signification value (p) considered for choice criteria in the hypothesis test was 0,05, which is according to the literature and best practices in data analysis in social sciences.

3 Results

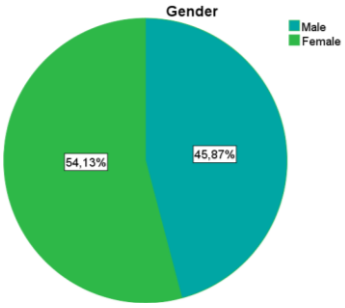
In this chapter, the results obtained throughout the investigation are going to be presented, according to three main sections: characterization of the sample; analysis of latent variables and psychometric properties of the instruments; and validation of the theoretical model and its hypotheses.

3.1 Characterization of the sample

3.1.1 Socio-demographic characterization

First of all, it is important to reaffirm that the number of valid cases observed within the sample are 109. Therefore, and regarding the socio-demographic factors, there are two main variables that can be analyzed: age and gender.

Figure 9 – Distribution of gender (%) within the sample



In what it concerns to gender, there is a balance between the percentage of male (46%) and female (54%) respondents, as it is possible to see through Figure 9.

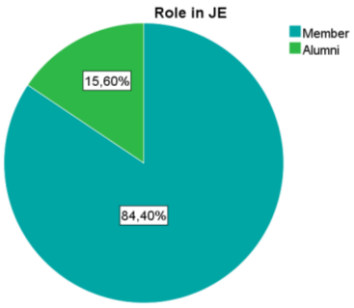
Regarding the distribution of members according to age, one can see that the elements of the sample have between 18 and 25 years old (with two outliers, one member with 26 years old and other with 32), which is related with the fact that all of the members of Junior Enterprises must be university's students. It is also possible to conclude that the 26% of students have 21 years old (mode = 21) which is also the median value, meaning that 50% of the respondents have less than 21 years old (Appendix 14.1 and 14.2).

3.1.2 Membership in Junior Enterprise

Regarding the membership in Junior Enterprises, there are six main variables that can be analyzed: whether the individual was a member or an alumni of the JE, if he/she was a founding member of the JE, if he/she had a management role in the JE, what was his/her seniority and what were the main reasons for application and permanence in the JE.

Starting by the role or bond of the individuals to the JE, the majority of them were members of Junior Enterprises, while 16% of the sample were past members of Junior Enterprises at the moment they answered the survey (Figure 10).

Figure 10 – Distribution of Role in JE (%) within the sample



Still focusing on the role of individuals in JEs, one can notice that, 66% of current members did not have a management position in the Junior Enterprise (Appendix 14.1); furthermore the majority of members (89%) were not founders of the Junior Enterprise (Appendix 14.2), which can be easily justified by the fact that 8 out of the 10 Portuguese Junior Enterprises have been created more than two years ago (as previously shown in Table 2) and the members stay in a Junior Enterprise, in average, 16 months (Appendix 14.3).

Therefore, and still focusing on the seniority of members, which varies between 1 and 72 months, it were created different classes of seniority, as it can be seen through Appendix 14.4 (until a period of three years, which is the common period a time an individual stay attached to an university (the minimum required time to complete a bachelor's degree), it were considered periods of one semester and, after those three years, the classes refer to a period of one year). So, it is possible to see that 39% of the individuals have from 6 to 12 months of membership in a Junior Enterprise.

Finally, Appendix 14.5 shows that the majority of the founding members (82%) have a management position in the Junior Enterprise.

3.2 Analysis of latent variables and psychometric properties of the instruments

As it was possible to conclude through the first chapter, the target variables of this study are the following: job embeddedness, work-life balance, motivation, and satisfaction. However, when analyzing the research model presented in Figure 8, it is possible to see that each of these variables, as well as the variable of performance (the one that is about to be studied as the dependent variable) are latent variables, which means that they are going to be constructed through the observation of other variables. Therefore, the results of the analysis of each of these variables are going to be presented as well as determination of the dimensions and constructs of the latent variables.

3.2.1 Job Embeddedness

When analyzing the seven topics that are related with the concept of job embeddedness (Table 4), and knowing a priori that this scale varies between 1 (strongly disagree) and 5 (strongly agree), it is possible to reach the conclusion that in every question the respondents used the maximum value of the scale but in three of them, the smallest value of the scale was never used.

Table 4: Statistics of Job Embeddedness' Variables

		1: JE - I feel attached to this JE	**2: JE** - It would be difficult for me to leave this JE	**3: JE** - I'm too caught up in this JE to leave	**4: JE** - I feel tied to this JE	**5: JE** - I simply could not leave the JE that I work for	**6: JE** - It would be easy for me to leave this JE	**7: JE** - I am tightly connected to this JE
N	Valid	109	109	109	109	109	109	109
	Missing	0	0	0	0	0	0	0
Mean		4,52	4,12	3,66	4,25	3,43	1,94	3,79
Mode		5	4[a]	4	4	3	1	4
Std. Deviation		,702	,930	1,073	,760	1,158	1,048	1,037
Minimum		2	2	1	2	1	1	1
Maximum		5	5	5	5	5	5	5

a. Multiple modes exist. The smallest value is shown

Table 4 also mirrors the fact that the first question is the one with the highest sample mean, and also the one with the lowest standard deviation, meaning that it is the question where there is a greatest consensus. Regarding the one with the lowest mean score, it is easily justifiable by the fact that its score should be analyzed in a reverse way.

It was performed an exploratory factor analysis in principal components with varimax rotation to evaluate the internal structure of the output data related to Job Embeddedness. A single dimension of Job Embeddedness was identified and it explains 58,3% of the total variance of the original items (Appendix 15.1.), which validates Crossley *et al* (2007) study.

From this factor, a single variable was constructed, once its Cronbach's Alpha coefficient[5] assured good internal consistency between the seven original variables (The only restriction that this dimension should obey was that Cronbach's Alpha coefficients should have values equal or greater than 0,7 (Nunnally, 1978).

[5] Cronbach's $Alpha_{Job\ Embeddedness}$ = 0,700 (Appendix 15.2)

So, it is possible to conclude that the mean of answers regarding Portuguese Junior Entrepreneurs inquired is around 4, which assumes a good result of Job Embeddedness within the respondents (Table 5).

Table 5: Statistics of Job Embeddedness Dimension

N	Valid	109
	Missing	0
Mean		3,9764
Median		4,0000
Mode		5,00
Std. Deviation		,72779
Minimum		2,00
Maximum		5,00

3.2.2 Work-Life Balance

In a first analysis to Work-Life Balance and its 10 associated variables, displayed in Table 6, it is possible to understand that the minimum and maximum values of the scale were used in order to answer to all the questions. It is also possible to see that the mean values in all the questions were around 2 and 3.

Table 6: Statistics of Work-Life Balance's Variables

		1: WLB Question 1	**2: WLB** Question 2	**3: WLB** Question 3	**4: WLB** Question 4	**5: WLB** Question 5	**6: WLB** Question 6	**7: WLB** Question 7	**8: WLB** Question 8	**9: WLB** Question 9	**10: WLB** Question 10
N	Valid	109	109	109	109	109	109	109	109	109	109
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3,03	2,53	2,60	2,35	2,97	2,36	2,27	2,19	2,11	2,23
Median		3,00	2,00	2,00	2,00	3,00	2,00	2,00	2,00	2,00	2,00
Mode		4	2	2	2	4	2	2	2	2	2
Std. Deviation		1,067	,929	,973	,907	1,101	,977	,959	,928	,875	,939
Minimum		1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5

However, according to the theory review, the concept of Work-Life Balance is composed by two dimensions, Work-Family Conflict - WFC (questions 1 to 5) and Family-Work Conflict - FWC (questions 6 to 10), which was also proved empirically (Appendix 15.3), after using the same statistical procedure that was used before (exploratory factor analysis in principal

components). In both dimensions a good level of internal consistency was guaranteed[6], which made possible to proceed to an individual analysis of each one.

Analyzing each of them, it is possible to see that the mean value of WFC (≈ 2,7) is higher than the one of FWC (≈ 2,2), but also that the maximum value of FWC is not the maximum of the scale, as it happens to WFC (Table 7).

Table 7: Statistics of Work-Life Balance's dimensions

		Dimension_WFC	Dimension_FWC
N	Valid	109	109
	Missing	0	0
Mean		2,6954	2,2312
Median		2,8000	2,2000
Mode		2,00	2,00
Std. Deviation		,82309	,72937
Minimum		1,00	1,00
Maximum		5,00	4,80

3.2.3 Satisfaction

In what it concerns to job satisfaction and its four respective variables, it is possible to understand, through Table 8, that the mean of answers is around the value 4, which is positive in terms of the scale presented. Besides this, it is also possible to see that, in all the variables, the lowest value of the scale (1=strongly disagree) was never used.

Table 8: Statistics of Satisfaction's Variables

		1: S - Most of the days, I feel excited with my current work at this JE	**2: S** - I find real pleasure in doing my work at this JE	**3: S** - In general, I like working in this JE	**4: S** - I am globally satisfied with my work at this JE
N	Valid	109	109	109	109
	Missing	0	0	0	0
Mean		4,12	4,12	4,50	4,17
Median		4,00	4,00	5,00	4,00
Mode		4	4	5	4
Std. Deviation		,703	,754	,587	,752
Minimum		2	2	3	2
Maximum		5	5	5	5

[6] Cronbach's Alpha $_{\text{Work-Family Conflict}}$ = 0,882 (Appendix 15.4)

Cronbach's Alpha $_{\text{Family-Work Conflict}}$ = 0,838 (Appendix 15.5)

Considering these results and also the empirical testing that was previously explained (Appendix 15.6), a single dimension of satisfaction was considered, which is according to the literature review performed.

Due to the fact that a good internal consistency between the four original variables was guaranteed[7], they were transformed into a single new variable.

So, computing the four original variables into a new one, it is possible to reach the conclusion that the mean of answers is around 4, which assumes a good result of Job Satisfaction within the respondents (Table 9).

Table 9: Statistics of Job Satisfaction

N	Valid	109
	Missing	0
Mean		4,2271
Median		4,2500
Mode		4,00
Std. Deviation		,59952
Minimum		2,25
Maximum		5,00

3.2.4 Motivation

As explained in the literature review's topic, employee's motivation can be assessed through the Job Design's instrument. Therefore, all the questions considered in this topic derived from the Job Design Survey.

Therefore, analyzing Job Design's 21 variables, displayed in Table 10, it is possible to conclude that the maximum value of the scale was used in every question except one, but the minimum value varied across the 21 variables.

However, in the authors' study, there are five dimensions considered within Job Design, which will impact in the result of MPS, according to Equation 1, previously presented.

The questions related to each of the five dimensions: Skill Variety[8], Task Identity[9], Task Significance[10], Autonomy[11] and Feedback[12] are available in the Appendix 15.8. However,

[7] Cronbach's $Alpha_{Satisfaction}$ = 0,876 (Appendix 15.7)

[8] Cronbach's $Alpha_{Skill\ Variety}$ = 0,561 (Appendix 15.9)

[9] Cronbach's $Alpha_{Task\ Identity}$ = 0,638 (Appendix 15.10)

when analyzing the levels of internal consistency, it was possible to conclude they were very low which indicated a low reliability. Therefore, it was decided to analyze and confirm empirically the dimensions in which these variables could be defined.

Table 10: Statistics of Job Design's Variables

		1: JDS Section 1 Question 1	**2: JDS** Section 1 Question 2	**3: JDS** Section 1 Question 3	**4: JDS** Section 1 Question 4	**5: JDS** Section 1 Question 5	**6: JDS** Section 1 Question 6	**7: JDS** Section 1 Question 7
N	Valid	109	109	109	109	109	109	109
	Missing	0	0	0	0	0	0	0
Mean		5,92	4,69	5,21	5,30	5,35	4,64	5,24
Median		6,00	5,00	5,00	5,00	5,00	5,00	5,00
Mode		7	5	5	5	6	6	6
Std. Deviation		1,203	1,495	1,428	1,364	1,243	1,561	1,096
Minimum		1	1	1	1	2	1	3
Maximum		7	7	7	7	7	7	7

		1: JDS Section 2 Question 1	**2: JDS** Section 2 Question 2	**3: JDS** Section 2 Question 3	**4: JDS** Section 2 Question 4	**5: JDS** Section 2 Question 5	**6: JDS** Section 2 Question 6	**7: JDS** Section 2 Question 7
N	Valid	109	109	109	109	109	109	109
	Missing	0	0	0	0	0	0	0
Mean		5,66	5,79	3,28	5,24	2,48	2,71	2,61
Median		6,00	6,00	3,00	5,00	2,00	2,00	2,00
Mode		6	6	2	5	2	2	2
Std. Deviation		0,874	1,081	1,645	1,017	1,358	1,416	1,522
Minimum		2	1	1	3	1	1	1
Maximum		7	7	7	7	7	7	7

		8: JDS Section 2 Question 8	**9: JDS** Section 2 Question 9	**10: JDS** Section 2 Question 10	**11: JDS** Section 2 Question 11	**12: JDS** Section 2 Question 12	**13: JDS** Section 2 Question 13	**14: JDS** Section 2 Question 14
N	Valid	109	109	109	109	109	109	109
	Missing	0	0	0	0	0	0	0
Mean		5,54	2,62	4,7	5,12	2,93	4,94	2,14
Median		6,00	2,00	5,00	5,00	3,00	5,00	2,00
Mode		6	2	6	6	2[a]	5	1
Std. Deviation		1,244	1,458	1,488	1,223	1,399	1,201	1,378
Minimum		1	1	1	2	1	1	1
Maximum		7	7	7	7	6	7	7

[10] Cronbach's $Alpha_{Task\ Significance}$ = 0,459 (Appendix 15.11)

[11] Cronbach's $Alpha_{Autonomy}$ = 0,503 (Appendix 15.12)

[12] Cronbach's $Alpha_{Feedback}$ = 0,769 (Appendix 15.13)

The conclusions demonstrated that, in fact, those five dimensions were not verified within the sample and different dimensions were proposed (Appendix 15.14). However, the new variables of Job Design made the calculus of MPS impossible to be performed, which means that the results of motivation cannot be assessed and the testing of Hypotheses 3, 4 and 5 is not possible.

3.3 Validation of the research model (and its hypotheses)

In order to validate the research hypotheses, linear regression models were estimated. Emphasis is given to the Backward method to estimate the multiple linear regression models and the Enter method to estimate the simple linear regression models.

As previously stated, all the hypotheses that include the variable of motivation were not possible to be tested once the dimensions needed for that were not verified, which means that **H3**, **H4** and **H5** are not going to be tested within this validation of research model.

So that it was possible to test the impact of Job Embeddedness, Satisfaction and Work-Life Balance in Performance (**H1**, **H2** and **H6)** using linear regression models. However, since Work-Life Balance is composed by two different dimensions, they are going to be analyzed separately. Therefore, the first model (Model 1) analyzes the impact of Job Embeddedness, Satisfaction and Family-Work Conflict in Performance, while the second model (Model 2) analyzes the impact of Job Embeddedness, Satisfaction and Work-Family Conflict in Performance.

All the assumptions necessary in order to apply the models were verified, meaning:

- Linear relations between the variables;
- Normality of random errors[13];
- Variance of the random errors is constant and equal to σ^2 [14];
- No correlation between the random errors[15];
- Independence of explanatory variables[16];

[13] Test of Kolmogorov-Smirnov's significance = 0,200 (Appendix 16.1)

[14] Homocedasticity of the random errors can be assumed

[15] Durbin-Watson $_{\text{Model 1}}$ = 1,950 (Appendix 16.2) ; Durbin-Watson $_{\text{Model 2}}$ = 2,045 (Appendix 16.2)

[16] Values of Tolerance and VIF in Appendix 16.3

Therefore, the estimated equations of both models are presented next, in Equation 2 and 3.

Estimated regression model - Model 1:

$$\widehat{Performance}^{*} = \underset{(0,432)}{0,553^{*}} + \underset{(0,003)}{0,468}\ \text{Satisfaction}^{*} \qquad \textbf{(2)}$$

Estimated regression model - Model 2:

$$\widehat{Performance}^{*} = \underset{(0,376)}{0,497^{*}} + \underset{(0,006)}{0,412}\ \text{Satisfaction}^{*} + \underset{(0,005)}{0,256}\ \text{Work-FamilyConflict}^{*} \qquad \textbf{(3)}$$

Thus, the results of both Multiple Linear Regression Models, which are available in Appendix 16.4 and Appendix 16.5, allowed the author to reach several conclusions about the acceptance or rejection of the seven hypotheses that were defined in the previous research model, once both of them were considered valid models[17].

Regarding the goodness of fit in both models, it is possible to notice that, in both models the values of "R Square" are relatively low, which means that there are other independent variables that explain variations in the dependent variable.

However, since both models proved to be valid, as it was previously seen, it becomes important to analyze the explanatory capacity of each of the independent variables.

Impact of Job Embeddedness on Performance

H1: *Job Embeddedness influences positively the Performance*

Through the analysis of the MLRM's, it was possible to conclude that this explanatory variable, Job Embeddedness, does not have a relationship with the dependent variable, meaning that Job Embeddedness does not have impact on the performance of Junior Entrepreneurs.

[17] ANOVA $_{\text{Model 1}}$: sig. = 0,001 ; ANOVA $_{\text{Model 2}}$: sig. = 0,000

However, when performing a simple linear regression (Model 3), it is possible to conclude that, despite being a very small value, Job Embeddedness, in the absence of other variables, explain about 5%[18] of the performance variation (Appendix 16.6).

Estimated regression model - Model 3:

$$\widehat{Performance}^{*} = \underset{(0,000)}{2,070^{*}} + \underset{(0,013)}{0,268}\ \text{JobEmbeddedness}^{*} \qquad \textbf{(4)}$$

Therefore, there was a validation of this hypothesis, due to the fact that the significance associated with this variable is lower than the level of significance (0.05).

Impact of Work-Life Balance on Performance

H2: *Work-Life Balance influences positively the Performance*

In order to test this hypothesis, two sub-hypotheses must be considered, once this variable demonstrated to have two different dimensions: Family-Work Conflict and Work-Family Conflict. Therefore, the hypotheses about to be suited are the following:

> ***H2a:*** *Family-Work Conflict influences negatively the performance*
>
> ***H2b:*** *Work -Family Conflict influences negatively the performance*

These two hypotheses were also tested through the analysis of the MLRM's that were previously developed.

Therefore, and regarding "Family-Work Conflit" dimension, the Model 1 indicated that this independent variable does not have significant contribution to explain the variation of performance (sig. = 0,305), meaning that **H2a** is rejected by the empirical evidence collected through this statistical approach.

[18] $R^2_{Model\ 3}$ = 0,056

On the other hand, if the WLB's dimension considered is the "Work-Family Conflict", the analysis of the Model 2 indicates that this explanatory variable has a significant contribution to explain variations on the performance, which leads to the acceptance of **H2b** (Sig. = 0,005). Thus, and performing a simple linear regression (Model 4) analysis (Appendix 16.7), it is possible to conclude that each unit variation in the Family-Work Conflict produces an estimated variation of 0,296 in the performance ($\widehat{ß}$ = 0,296).

Estimated regression model – Model 4:

$$\widehat{Performance}^{*} = \underset{(0,000)}{2,339^{*}} + \underset{(0,002)}{0,296}\ \text{Work-FamilyConflict}^{*} \qquad \textbf{(5)}$$

However, despite the fact that both variables are related, the expectations were that they would be negatively correlated and not positively, as what happened. Since there is not any research that defends this type of relationship between variables, this situation must be deeply analyzed in order to reach relevant conclusions, which can be done in future research.

Impact of Satisfaction on Performance

H6: *Satisfaction influences positively the Performance*

When analyzing the impact of satisfaction on performance, both MLR models indicate that this independent variable has a significant explanatory capacity, meaning that satisfaction has a significance contribution to explain the variation of performance, as reflected in the following equations:

Estimated regression model - Model 1:

$$\widehat{Performance}^{*} = \underset{(0,432)}{0,553^{*}} + \underset{(0,003)}{0,468}\ \text{Satisfaction}^{*} \qquad \textbf{(2)}$$

Estimated regression model - Model 2:

$$\widehat{Performance}^{*} = \underset{(0,376)}{0,497^{*}} + \underset{(0,006)}{0,412}\ \text{Satisfaction}^{*} + \underset{(0,005)}{0,256}\ \text{Work-FamilyConflict}^{*} \qquad \textbf{(3)}$$

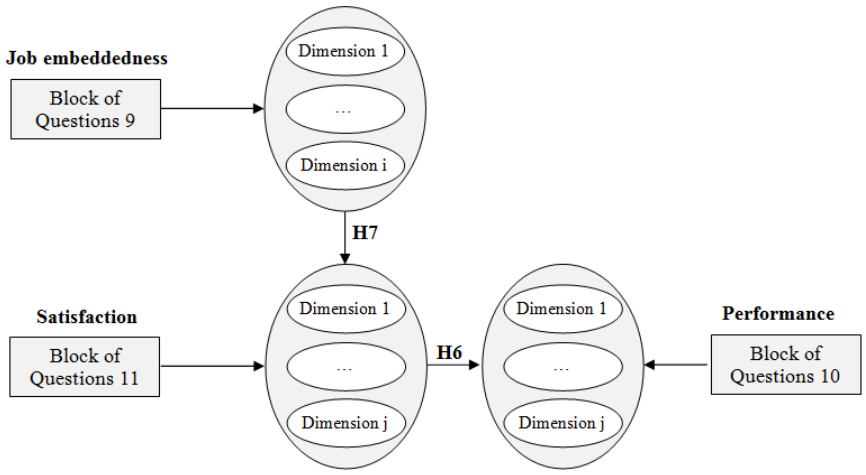
Based on this, it was conducted a simple linear regression model (Model 5) considering only these two variables (Appendix 16.8) and the results showed that each unit variation in satisfaction produces an estimated positive variation of 0,490 in performance, as indicated in the estimated regression model, displayed next.

Estimated regression model – Model 5:

$$\widehat{Performance}^{*} = \underset{(0,047)}{1,065^{*}} + \underset{(0,000)}{0,490}\ \text{Satisfaction}^{*} \qquad \textbf{(6)}$$

However, when analyzing the research model presented in Figure 8, it is understandable for the readers to "believe" that satisfaction can have a mediator effect in the relation between Job Embeddedness and Performance, as Figure 11 suggests.

Figure 11: Possible mediator effect between Job Embeddedness and Performance



Thus, in order to test that hypothesis (based on the methodology of Baron and Kenny (1986), available in Appendix 16.9), it is firstly important to test the impact of Job Embeddedness in Satisfaction.

Impact of Job Embeddedness on Satisfaction

H7: *Job Embeddedness influences positively the Satisfaction*

The analysis of the relationship between these two variables was performed using a Simple Linear Regression Model (Model 6, Appendix 16.10) and the conclusions of its analysis show that there is a relationship between both of them, meaning that Job Embeddedness has a significant contribution to explain the variation of Satisfaction.

Detailing, each unit variation in job embeddedness produces an estimated variation of 0,467 in the satisfaction of employees.

Estimated regression model – Model 6:

$$\widehat{Satisfaction}^{*} = \underset{(0,000)}{2,372^{*}} + \underset{(0,000)}{0,467}\ \text{JobEmbeddedness}^{*} \qquad \textbf{(7)}$$

Therefore, and going back to the possibility of Satisfaction being a mediator between Job Embeddedness and Performance, since the analysis of the impact of Job Embeddedness on Performance (Model 3); the analysis of the impact of Job Embeddedness on Satisfaction (Model 6); and the analysis of the impact of Satisfaction on Performance (Model 5) it is now necessary to conduct a MLRM where the independent variables are Job Embeddedness and Satisfaction and the dependent variable is Performance (Appendix 16.11). Thus, since its results show that Job Embeddedness is no longer significant when Satisfaction is also considered, the findings support that there is mediation role of satisfaction. This explains the fact that Job Embeddedness demonstrated an insignificant explanatory capacity in Model 1 and 2 (when the variable of satisfaction was present) and a significant explanatory capacity in Module 3 (where there was not any other independent variable).

3.3.1 Hypotheses Validation Summary

In order to sum up the validation of hypotheses that was previously conducted, Table 11 indicates whether each hypothesis was validated or not after the study, as well as the reason that contributed to that decision.

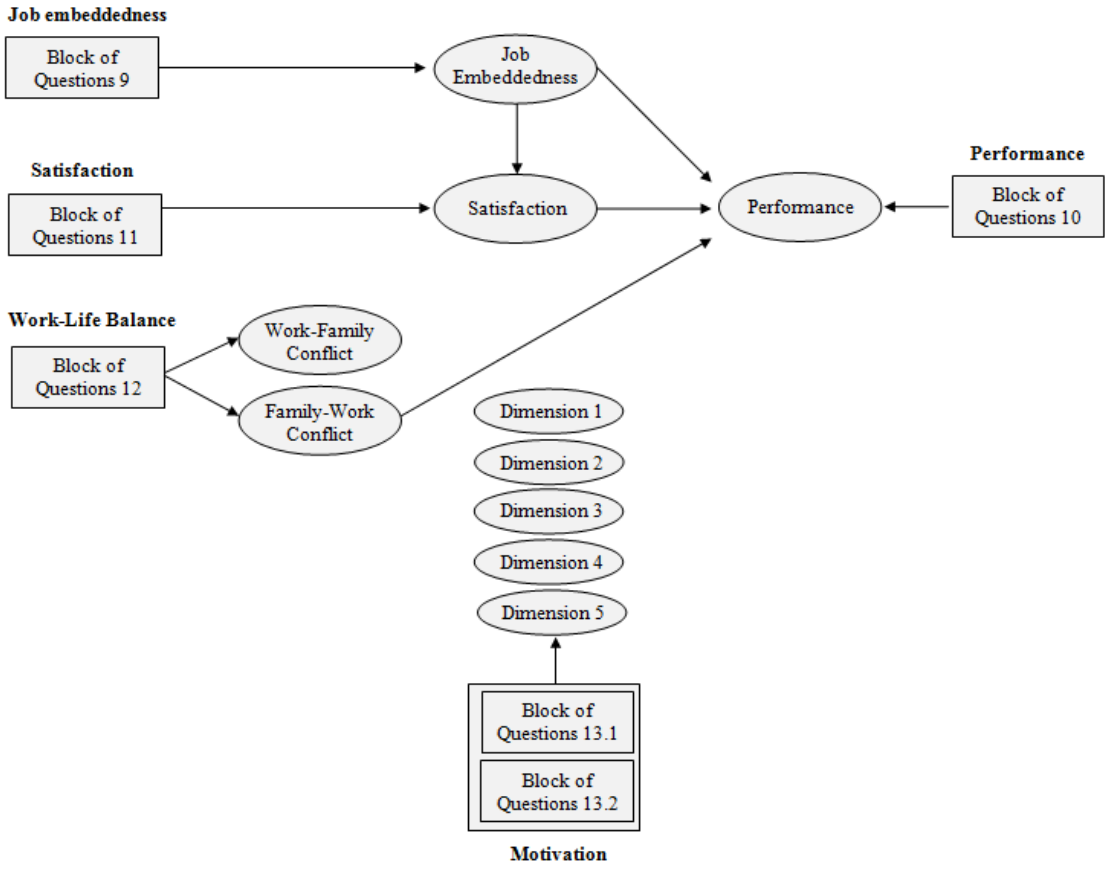
Table 11: Hypotheses Validation Summary

Hypotheses	Status
H1: Job embeddedness influences positively the performance	Validated (Accepted)
H2: Work-Life Balance influences positively the performance	---
H2a: Family-Work Conflict impacts on the performance	Not validated (Rejected)
H2b: Work-Family Conflict impacts on the performance	Validated (Accepted)
H3: Work-Life Balance influences positively the motivation	Not possible to test
H4: Motivation influences positively the performance	Not possible to test
H5: Motivation influences positively the satisfaction	Not possible to test
H6: Satisfaction influences positively the performance	Validated (Accepted)
H7: Job Embeddedness influences positively the satisfaction	Validated (Accepted)

3.3.2 Empirical Model

Based on the results' analysis and the conducted hypotheses' validation, it was possible to transform the Research Model (Figure 8) into an Empirical Model (Figure 12).

Figure 12: Empirical Model



This model highlights the lack of relationship between Motivation and: Work-Life Balance, Satisfaction and Performance, once it was not possible to perform such analysis. However, the conclusions of this study show that, within the sample that served as a base for this research, there were five dimensions within the two sections of the Job Design Instrument.

It also mirrors the fact that Work-Life Balance can be divided into two different dimensions: Work-Family Conflict and Family-Work Conflict. Besides this, the study also showed that Performance can be predicted by Job Embeddedness, Satisfaction and Family-Work Conflict.

4 Discussion

This chapter aims to, not only summarize all the conclusions reached with the conduction of this study, but also to interpret the results of the research obtain, so that it becomes possible to understand the scope of the research in the literature, the implications for Human Resource Management and Junior Enterprises and also to define which were the main limitations of this study. Finally, recommendations for future research will be presented, once the research field only has to gain with several different contributions.

4.1 Conclusions

Youth unemployment rate have been increasing across the last few years, which makes it important for young professionals to differentiate within the labor market. Therefore, and in order to be considered valuable human resources, young people should start working on their career even before entering into the marketplace, hence recruiters indicate that, when analyzing a résumé, they value the enrollment on extracurricular activities, mainly if they allow the application of content knowledge.

As a way to overcome this difficulty that young people are facing, and also as a way to promote improvements to companies with a lower cost, since insolvencies in European companies have been increasing, the concept of Junior Enterprise arose.

Therefore, Junior Enterprises are non-profit social organizations, which are formed uniquely by students that belong to the university to whom that Junior Enterprise is associated. This means that all the members of Junior Enterprises are still students, who apply the knowledge they acquire in classes in real cases of real companies.

So, as it is easy to imagine, these enterprises have very specific characteristics, as the fact that it is mandatory that its members they are working and studying at the same time and also the fact that there is not any regular reward associated with the performance of each member's tasks, even though some JE's charge for their projects and divide the profits within the team members (this characteristic change from JE to JE).

For that reason, it was important to understand some variables of individuals' behavior, which can impact on their performance.

The first one was Job Embeddedness, which refers to the extent to which people have links to other people or activities; to the perceived compatibility with organizational context; and to the perceived cost/benefit of abandoning the job and/or company. All these three features translate in employees' willingness to stay in the company. Therefore, the author's expectation, based also on the studies of Lee *et al* (2004) and Khattak *et al* (2012), was that this variable would influence positively the members' performance. However, the results' analysis proved that Job Embeddedness has very little impact on the Performance of the members of the sample.

Despite the small explanatory capacity of Job Embeddedness in predicting Performance, the results also showed that the variable of Satisfaction works as mediator between them, which means that Job Embeddedness impacts on Satisfaction, which will impact in Performance. Thus, this research suggests that embedded members will feel more satisfied with their job and that will improve their performance and results in terms of, not only their work's quantity, but also in terms of its quality.

Regarding Work-Life Balance, the results of this study confirm the findings of Netemeyer *et al* (1996), once two dimensions within this concept were found: Family-Work Conflict ("participation in the family role is made more difficult by virtue of participation in the work role", Greenhaus & Beutell, 1985) and Work-Family Conflict ("participation in the work role is made more difficult by virtue of participation in the family role", Greenhaus & Beutell, 1985)

This way, it was possible to conclude that Family-Work Conflict does not have an impact on the performance, which means that it is not possible to predict Performance based on the values of Family-Work Conflict. On the other hand, the results had proven that Work-Family impact has impact on the Performance, as it was expected and hypothesized. However, the results indicate that these two variables are positively related, meaning that the higher the Work-Family Conflict, the better the Performance of members, which is not according to the literature review conducted.

In what it concerns to a widely known and studied concept, which is motivation, the main framework that served as a base was the framework of Hackman & Oldham (1975), which states that in order to assess the Motivating Potential Score, it is necessary to analyze five different dimensions within Job Design: Skill Variety, Task Identity, Task Significance, Feedback and Autonomy. However, a deep analysis to the results of the sample showed that it

was not possible to analyze these five dimensions once they lacked internal consistency, which made the testing of three hypotheses an impossible task.

Therefore, in terms of implications for the Human Resource Management, this study highlights the importance of making employees feel integrated and linked to the company, as a way to make them feel happier and satisfied with their work, which will guarantee a best performance from that same employees, which will lead to better organizational performance in terms of the members of JE's.

Summing up, if the managers of JE's pay attention to all of these variables, they will, not only improve JE's performance and reputation, by the delivery of projects with higher quality, but also to improve members' knowledge, giving them tools to be more valuable human resources when entering the labor market, which will allow them to overcome the difficulties that young professionals are struggling with nowadays, as previously presented.

4.2 Limitations

This research presented some limitations during its conduction, which were already presented across the different chapters of this work. The main limitations found were the following:

- The absence of previous studies regarding Junior Enterprises brought some difficulties in terms of the design of the model, once there was not any research about the variables of organizational behavior within this specific sector of the market and its specific characteristics and features. Nevertheless, the concepts and evidences found on Literature Review helped to minimize the risk and to guarantee proximity with the research model designed;

- Extrapolation of the results for the population, which can be considered as the major limitation of this research. This topic means that, as presented in the methodology chapter, the fact that the sample was selected using non-probabilistic methods makes the projection of the results for the population impossible. However, the statistical techniques that were used and the sample size ensure empirical evidence to answer the research hypotheses;

- Now, regarding the construction of the survey, in five blocks of questions (excluding the first one, which focus on the characterization of sample), there is an option of answer that is

missing: "do not know/ do not answer". This would minimize the risk of the individuals respond to a question using an option that could not be adequate or suitable for answering it;

- Still focusing on the methodology, other limitation is related to the preliminary studies (or, in this case, the lack of them). Since the research was based on other authors' studies (all of them written in English) and this study performed an immediate application of constructions to a Portuguese sample, the translation of these instruments was not subjected to a test of reverse translation in order to understand if there was a correct understanding;
- Finally, other limitation of this study, related to the analysis of results and testing of hypothesis, is the fact that the concept of motivation was not able to assessed, once the dimensions of job design that would enable the author to analyze it did not verify within this sample, which made the testing of three hypotheses impossible.

4.3 Recommendations

The sector of Junior Enterprises is a sector that is underinvestigated, which means that there is a vast number of thematic that could be analyzed and also that the study of any variables regarding this sector would be, *per se*, useful in terms of research and contribution for the knowledge about new topics.

One recommendation for future research would be to apply the study to a larger number of countries, which would allow the comparison between them. However, in order to get results that are relevant, the author proposes to compare results of countries that are part of the same Confederations. Therefore, the author suggests that in future studies about the concept, the inquired population should be the European Junior Entrepreneurs, while comparing the results from different countries in order to understand if the variables are context driven.

Still focusing on the topic of "population and sampling", as stated previously, the sample should be defined using a probabilistic method (simple random, systematic, stratified and cluster (Malhotra, 2007)), in order to guarantee that the results obtained within the sample can be inferred for the entire population (which did not happen in the present study).

In the future, something that could also be studied is the impact of socio-demographic variables on each of the variables considered, which can give good insights for the analysis of this sector.

Other recommendation that future research must consider is the way how Junior Entrepreneurs' performance is assessed. In author's opinion, the performance of JE's members should be analyzed in terms of quantifiable results of their work (using, for example Key Performance Indicators – KPI's), instead of their perceptions about its quantity and quality. This would guarantee a more accurate measurement of performance, as stated by Parmenter (2010).

Other recommendation is related with the study of other concept that the research model aimed to study: motivation. As previously stated, the motivation would only be possible to study if the variables of job dimension were combined in a specific way (Equation 1). Since that combination was not possible, (from Appendix 15.9 to Appendix 15.14), all the hypotheses that considered motivation were not able to be study. Therefore, in future research there should be considered the idea of use a different instrument to assess Motivation and infer if the hypotheses should be accepted or rejected.

Finally, the last recommendation is related with the research model and acceptance (or rejection) of hypotheses. This means that, in future research, the motive that led to the non-validation of present research model, could be analyzed.

5 References

Scientific Papers, Books and Reports

1. Allen, N. J. and Meyer, J. P. (1990) The measurement and antecedents of affective, continuance and normative commitment to the organization. ***Journal of occupation psychology***, Volume 63, 1-18
2. Baron, R. B. and Kenny, D. A. (1986) The moderator-mediator variable distinction in social psychology research: conceptual, strategic and statistical considerations. ***Journal of Personality and Social Psychology***, Volume 51, Number 6, 1173-1182
3. Besich, J. (2006) ***Job embeddedness versus traditional models of voluntary turnover: a test of voluntary turnover prediction***. Dissertation prepared for the degree of doctor of philosophy in the University of North Texas.
4. Bethlehem, J. and Biffignandi, S (2012) ***Handbook of web surveys***. New Jersey: John Wiley & Sons
5. Bryman, A. (2008) ***Social Research Methods***. 3rd edition. New York: Oxford University Press
6. Câmara, P. B.; Guerra, P. B. and Rodrigues, J. V. (1997) ***Humanator: Recursos Humanos e Sucesso Empresarial***. Lisbon: Publicações Dom Quixote
7. Cinamon, R. G. (2006) Antecipated work-family conflict: effects of gender, self-efficacy, and family background. ***The career development quarterly***, Volume 54, Number 3, 202-215
8. Creditreform (2012) ***Insolvencies in Europe 2011/12*****.** Neuss: Creditreform Economic Research Unit
9. Crossley, C. D.; Jex, S. M.; Bennet, R. J. and Burnfield, J. L. (2007) Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. ***Journal of Applied Psychology***, Volume 92, Number 4, 1031-1042
10. Emory, C. W. (1980) ***Business Research Methods***. Homewood: Richard D. Irwin
11. Foss, N. J.; Minbaeva, D. B.; Pedersen, T. and Reinholt, M. (2009) Encouraging knowledge sharing among employees: how job design matters. ***Human Resource Management***, Volume 48, Number 6, 871-893
12. Feldman, D. C. and Arnold, H. J. (1983) ***Managing individual and group behavior in organizations***. Tokyo: McGraw-Hill, Inc.
13. Franek, M. and Vecera, J. (2008) Personal characteristics and job satisfaction. ***Ekonomika a management***, Volume 4, 64-76
14. Freeman, R. B. (1978) Job satisfaction as an economic variable. ***American Economic Review***, Volume 68, Number 2, 135-141
15. Ghauri, P; Grønhaug, K. and Kristianslund, I. (1995) ***Research methods in business studies – a practical guide***. Hertfordshire: Prentice Hall
16. Goldberg, L. R. (1990). An alternative "description of personality": The Big Five Factor Structure. ***Journal of personality and social psychology***, Volume 59, Number 6, 1216-1229

17. Greenhaus, J. H. and Beutell N. J. (1985) Sources of conflict between work and family roles. ***The academy of management review***, Volume 10, Number 1, 76-88

18. Hackman, J. R.; Oldham, G. R. (1975) Development of the Job Diagnostic Survey. ***Journal of Applied Psychology***, Volume 60, Number 2, 159-170

19. Heywood, J. S.; Siebert, W. S. and Wei, X. (2010) Work-life balance: promises made and promises kept. ***The international journal of human resource management***, Volume 21, Number 11, 1976-1995

20. Hill, M. M. and Hill, A. (2005) ***Investigação por questionário***. 2nd edition. Lisboa: Edições Sílabo

21. Judge, T. A.; Bono, J. E. and Locke, E. A. (2000) Personality and job satisfaction: the mediating role of job characteristics. ***Journal of Applied Psychology***, Volume 85, Number 2, 237-249

22. Jyoti, J. and Sharma, J. (2012) Impact of market orientation on business performance: role of employee satisfaction and customer satisfaction. ***Sage Publications***¸ Volume 16, Number 4, 297-313

23. Khattak, F. U.; Hussain, A.; Mehmood, Q.; Mumtaz, A.; Rehman, I. U.; et al. (2012) Shrinking Employees Turnover Intention by applying Tools of Job Embeddedness (Used as a Mediator). ***Information Management and business review***, Volume 4, Number 7, 370-378

24. Kumar, H. and Chakraborty, S. K. (2013) Work Life Balance (WLB): A Key to Organizational Efficacy. ***A Peer Reviewed Research Journal***, Volume XV, Issue 1, 62-70

25. Lawler III, E. E. (1969) Job design and employee motivation. ***Personnel Psychology***, Volume 22, Issue 4, 426-435

26. Lee, T. W.; Mitchell, T. R.; Sablynski, C. J.; Burton, J. P.; Holtom, B. C. (2004) The effects of job embeddedness on organizational citizenship, job performance, volitional absences and voluntary turnover. ***Academy of Management Journal***, Volume 47, Number 5, 711-722

27. Lund, D. B. (2003) Organizational culture and job satisfaction. ***The Journal of Business & Industrial Marketing,*** Volume 18, Number 3, 219-236

28. Malhotra, N. K. (2007) ***Marketing research: an applied orientation***. Upper Saddle River: Prentice Hall

29. Manzoor, Q. (2011) Impact of employees' motivation on organizational effectiveness. ***Macrothink Institute***, Volume 3, Number 1

30. Miryala, R. K. and Thangella, S. (2013). Job satisfaction among government doctors: an exploratory study. ***The IUP Journal of Organizational Behavior***, Volume XII, Number 1, 41-74

31. Mitchell, T. R.; Holtom, B. C.; Lee, T. W. and Erez, M. (2001). Why people stay: using job embeddedness to predict voluntary turnover. ***Academy of management journal***, Volume 44, Number 6, 1102-1121

32. Nemanick Jr., R.C. and Clark, E.N. (2002) The differential effects of extracurricular activities on attributions in résumé evaluation. ***International Journal of Selection and Assessment***, Volume 10, Number 3, 206-217

33. Netemeyer, R. G.; Boles, J. S. and McMurrian, M. (1996) Development and validation of work-family conflict and family-work conflict scales. ***Journal of Applied Psychology***, Volume 81, Number 4, 400-410

34. Ng, T. W. H. and Feldman, D. C. (2010) The impact of job embeddedness on innovation-related behaviors. ***Human Resource Management***, Volume 49, Number 6, 1067-1087

35. Nohria, N.; Groysberg, B.; Lee, L. (2008) Employee motivation: a powerful new model. ***Harvard Business Review***, 78-84

36. Nunnally, J. (1978) ***Psychometric theory***. 2nd edition. New York: McGraw-Hill.

37. OECD (2009) ***Work satisfaction***, Society at a Glance 2009: OECD Social Indicators

38. OECD (2012) ***Policy brief on youth entrepreneurship – entrepreneurial activities in Europe***. Luxembourg: Publications Office of the European Union

39. OECD (2013) ***Youth entrepreneurship – a background paper for the OECD Centre for Entrepreneurship, SME's and local Development***. Paris: OECD

40. Parmenter, D. (2010) ***Key Performance Indicators: Developing, Implementing and Using Winning KPI's***. 2nd edition. New Jersey: John Wiley & Sons

41. Sánchez-Vidal, M. E.; Cegarra-Leiva, D. and Cegarra-Navarro, J. G. (2012) Gaps between managers' and employees' perceptions of work-life balance. ***The international journal of human resource management,*** Volume 23, Number 4, 645-661

42. Seiler, S.; Lent, B.; Pinkowska, M. and Pinazza, M. (2012) An integrated model of factors influencing project managers' motivation – findings from a Swiss survey. ***International Journal of Project Management,*** Volume 30, Issue 1, 60-72

43. Steers, R. M. (1977) Antecedents and outcomes of organizational commitment. ***Administrative Science Quarterly***, Volume 22, 46-56

44. Ueda, Y. (2012) The effects of the perception of work-life balance on acceptance of work arrangement requests. ***International business research***, Volume 5, Number 8, 24-32

45. Wang, J. and Verma, A. (2012) Explaining organizational responsiveness to work-life balance issues: the role of business strategy and high-performance work systems. ***Human Resource Management,*** Volume 51, Number 3, 407-432

46. Ward, C. and Yates, D. (2013) Extracurricular activities: The impact on business students' personal growth and employability. ***Business Education Innovation Journal***, Volume 5, Number 1, 6-10

47. Yücel, I. (2012) Examining the relationships among job satisfaction, organizational commitment, and turnover intention: an empirical study. ***International Journal of Business and Management***¸ Volume 7, Number 20, 44-58

Web Bibliography

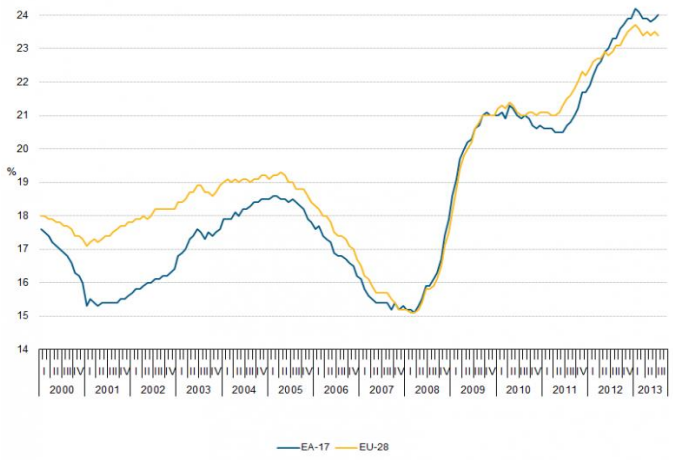
1. Aveiro Smart Business - http://asmartbusiness.pt/ (Accessed on May 2013)
2. BDSU - http://www.bdsu.de/ (Accessed on May 2013)
3. Católica Students' Corporation - http://www.csc-porto.com/ (Accessed on June 2013)

4. CEJE - http://www.ceje.org/ (Accessed on May 2013)
5. European Commission - Eurostat (2013) http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics (Accessed on September 2013)
6. FEP Junior Consulting - http://www.fjc.pt/ (Accessed on May 2013)
7. ISCTE Junior Consulting - http://isctejuniorconsulting.pt/ (Accessed on May 2013)
8. JADE Austria - http://www.jadeaustria.at/ (Accessed on May 2013)
9. JADE Belgium - http://www.jadebelgium.eu/ (Accessed on May 2013)
10. JADE Europe - http://www.jadenet.org/ (Accessed on May 2013)
11. JADE Italy - http://jadeitalia.org/ (Accessed on May 2013)
12. JADE Poland - https://www.facebook.com/JADEPoland/info (Accessed on May 2013)
13. JADE Portugal - http://jadeportugal.com/ (Accessed on May 2013)
14. JADE Romania - http://www.jaderomania.org/ (Accessed on May 2013)
15. JADE Switzerland - http://jadenet.org/jenet/index.php/federation/view/319 (Accessed on May 2013)
16. JEEFEUC - http://jeefeuc.com/ (Accessed on May 2013)
17. JeKnowledge - http://jeknowledge.pt/ (Accessed on May 2013)
18. JuniFEUP - http://www.junifeup.pt/ (Accessed on May 2013)
19. Junitec - http://junitec.ist.utl.pt/ (Accessed on May 2013)
20. UniPartners - http://www.unipartners.nl/nl/ (Accessed on May 2013)
21. UTAD Solutions Consulting - http://home.utad.pt/~usc/home.htm (Accessed on May 2013)

List of Appendixes

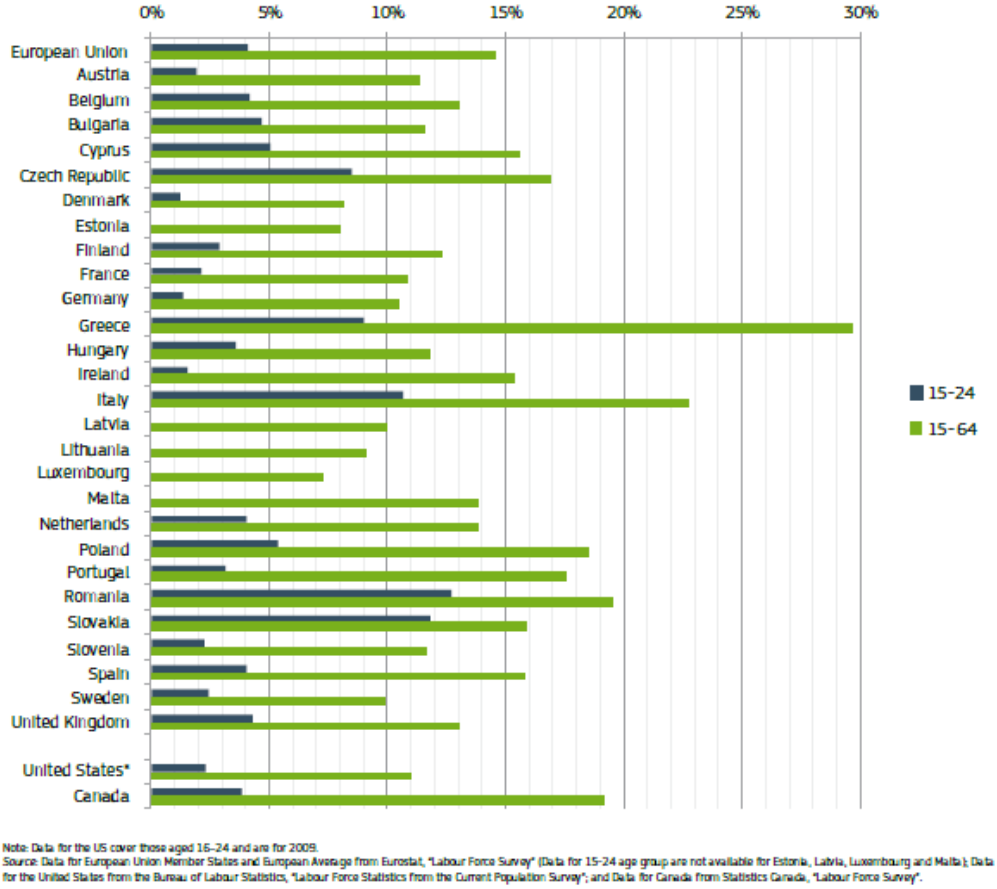
1. **Youth unemployment rates, EU-28 and EA-17, seasonally adjusted, January 2000 - July 2013 (%)**

(Source: European Comission - Eurostat, 2013)



2. **Self-employment rates by country and age, 2010**

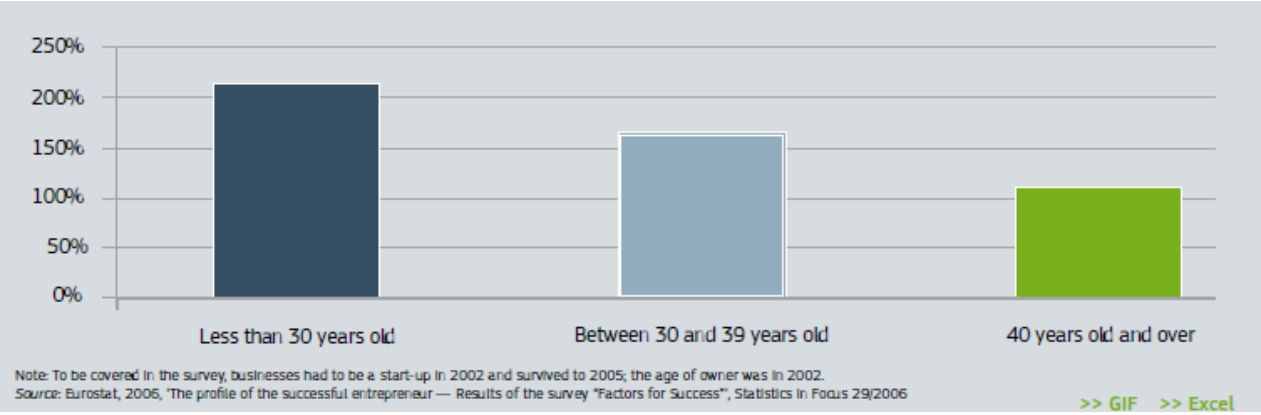
(Source: OECD, 2012)



Note: Data for the US cover those aged 16-24 and are for 2009.
Source: Data for European Union Member States and European Average from Eurostat, "Labour Force Survey" (Data for 15-24 age group are not available for Estonia, Latvia, Luxembourg and Malta); Data for the United States from the Bureau of Labour Statistics, "Labour Force Statistics from the Current Population Survey"; and Data for Canada from Statistics Canada, "Labour Force Survey".

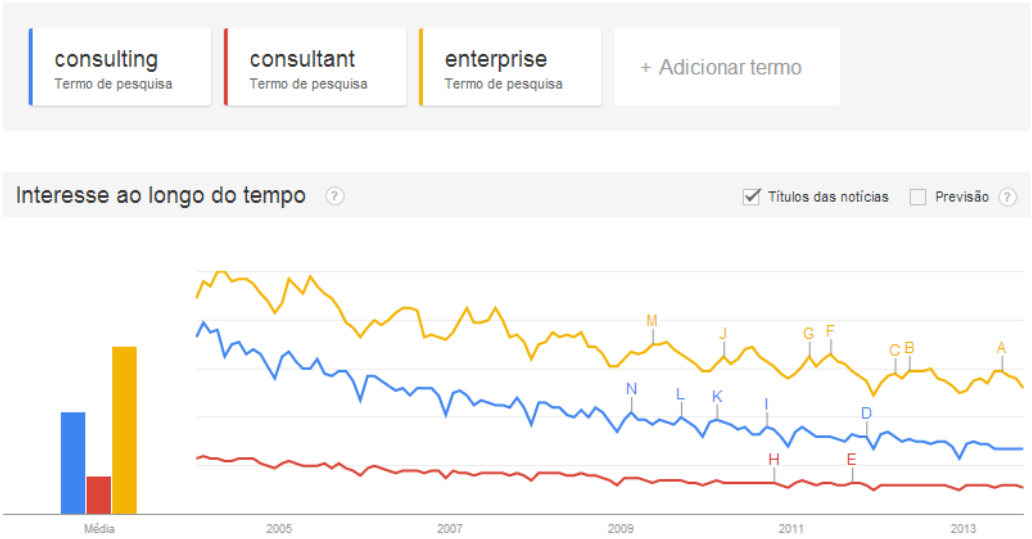
3. Average employment growth rates (%) for enterprises surviving three years (EU)

(Source: OECD, 2012)



4. Evolution of the interest in the concepts of: "consulting", "consultant" and "enterprise"

(Source: Google Trends, 2013)



5. Evolution of the interest in the concepts of: "junior consulting", "junior consultant" and "junior enterprise"

(Source: Google Trends, 2013)

6. Corporate insolvencies in Western Europe

(Source: Creditreform, 2012)

■	2011	2010	2009	2008	2007	Change 2010/11 in percent
Austria	6,194	6,657	7,076	6,500	6,362	- 7.0
Belgium	10,182	9,570	9,382	8,476	7,678	+ 6.4
Denmark	5,447	6,461	5,710	3,709	2,401	- 15.7
Finland	3,005	2,864	3,275	2,612	2,254	+ 4.9
France	49,506	51,060	53,547	49,723	42,532	- 3.0
Germany	30,200	32,060	32,930	29,580	29,150	- 5.8
Greece	452	355	355	359	524	+ 27.3
Ireland	1,631	1,525	1.406	773	363	+ 7.0
Italy *)	11,792	10,089	8,354	6,498	5,518	+ 16.9
Luxembourg	961	918	698	590	680	+ 4.7
Netherlands	7,000	7,211	8,040	4,635	4,602	- 2.9
Norway	4,361	4,435	5,013	3,637	2,845	- 1.7
Portugal	6,025	5,144	4,450	3,267	2,123	+ 17.1
Spain	5,752	4,845	4,984	2,528	880	+ 18.7
Sweden	7,177	7,546	7,892	6,298	5,791	- 4.9
Switzerland **)	6,661	6,255	5,215	4,222	4,314	+ 6.5
United Kingdom	18,571	17,468	19,908	16,268	12,893	+ 6.3
Total	**174,917**	**174,463**	**178,235**	**149,675**	**130,910**	**+ 0.3**

*) Since 2006, the insolvency statistics compiled by the register of companies in Italy include only company headquarters and no longer the individual branches of a company. **) Since 1.1.2008, companies can be officially closed down and deleted from the register by means of bankruptcy proceedings: Section 731b OR.

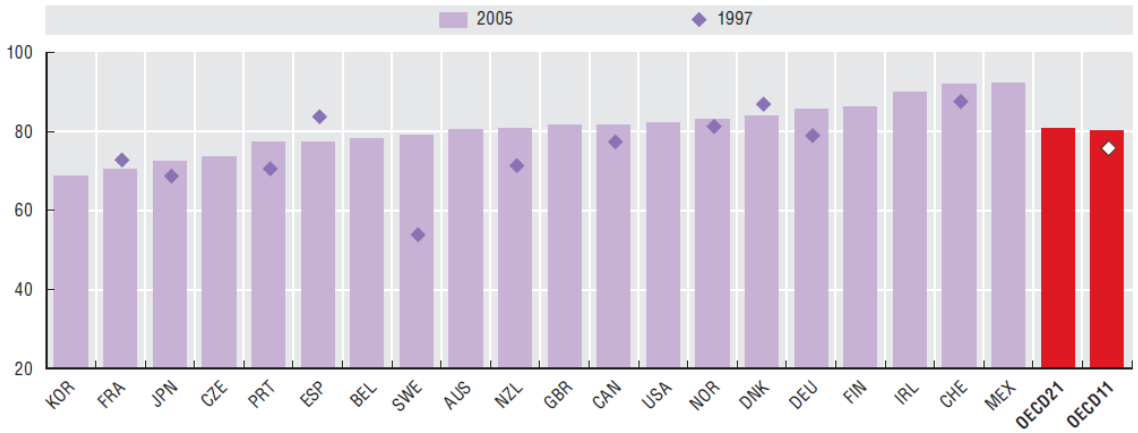
7. How to fulfill the drives that motivate employees

(Source: Nohria et al, 2008)

DRIVE	PRIMARY LEVER	ACTIONS
1 Acquire	Reward System	■ Sharply differentiate good performers from average and poor performers ■ Tie rewards clearly to performance ■ Pay as well as your competitors
2 Bond	Culture	■ Foster mutual reliance and friendship among coworkers ■ Value collaboration and teamwork ■ Encourage sharing of best practices
3 Comprehend	Job Design	■ Design jobs that have distinct and important roles in the organization ■ Design jobs that are meaningful and foster a sense of contribution to the organization
4 Defend	Performance-Management and Resource-Allocation Processes	■ Increase the transparency of all processes ■ Emphasize their fairness ■ Build trust by being just and transparent in granting rewards, assignments, and other forms of recognition

8. Percentage of all employees completely, very or fairly satisfied with their jobs

(Source: OECD, 2009)



9. A model of organizational culture types

(Source: Lund, 2003)

Source: Adapted from Cameron and Freeman (1991)

10. Interview to Pedro Lourenço, former International Manager and current Vice-President of JADE Portugal

My name is Sónia Filipe and I am a former member of ISCTE Junior Consulting, a Portuguese Junior Enterprise, registered in JADE Portugal.

At the moment I am writing my master thesis which is related with Junior Enterprises, once its theme is the following: performance, motivation and satisfaction in Junior Enterprises. In order to collect some relevant information about the Junior Enterprise Movement I would like to ask you if you could please answer some questions.

1. When was the first Junior Enterprise created and in which country?

2. Can you briefly explain the Junior Enterprise Movement worldwide?

3. When was JADE Europe founded?

4. How many country members are part of JADE?

5. What is the name of the federation of each country member?

6. What are consultative members? How many consultative members of JADE Europe exist and which ones?

7. How many Junior Enterprises are represented by JADE Europe?

8. How many students are part of the movement?

Since you are the Vice-President of JADE Portugal, and the evolution of the Junior Enterprise Movement is something that you are concerned about, as soon as I deliver my thesis I can provide you the results in order to improve the Junior Enterprise Movement.

Thank you very much!

11. Interview to Eloísa Ferreira, current International Manager of JADE Portugal

My name is Sónia Filipe and I am a former member of ISCTE Junior Consulting, a Portuguese Junior Enterprise, registered in JADE Portugal.

At the moment I am writing my master thesis which is related with Junior Enterprises, once its theme is the following: performance, motivation and satisfaction in Junior Enterprises. In order to collect some relevant information about the Junior Enterprise Movement I would like to ask you if you could please answer some questions.

1. Can you briefly explain the Junior Enterprise Movement in Portugal?
2. How many Junior Enterprises are currently represented by JADE Portugal? Which ones?
3. How many Junior Initiatives exist? Which ones?
4. How many Junior Entrepreneurs are represented by JADE Portugal?
5. How are they divided within the different Junior Enterprises? Meaning, what is the number of members of each Junior Enterprise?
6. For how long do the members stay linked to a Junior Enterprise?
7. Is the members' work rewarded?

Since you are the International Manager of JADE Portugal, and the evolution of the Junior Enterprise Movement is something that you are concerned about, as soon as I deliver my thesis I can provide you the results in order to improve the Junior Enterprise Movement.

Thank you very much!

12. Web-based survey applied to the sample

Este questionário serve para fins exclusivamente académicos, no âmbito de uma dissertação de mestrado de uma aluna do ISCTE-IUL. As respostas são anónimas e os dados serão tratados de forma totalmente confidencial.

Por favor, responda a todas as questões, pois só assim estará a contribuir para o sucesso desta investigação. O seu preenchimento demora cerca de 15 a 20 minutos.

Será usado o termo "JE", sempre que se referir a "Júnior Empresa".

0. Tens alguma ligação a uma Júnior Empresa: Não □ Sim □

1. Vínculo à Júnior Empresa: Membro atual □ Alumni □

2. Género: Masculino □ Feminino □

3. Idade: _____

4. A tua função na Júnior Empresa é de direção? ***(Se alumni, considerar a última função desempenhada na JE)****:* Sim □ Não □

5. Foste membro fundador da tua Júnior Empresa? Sim □ Não □

6. Antiguidade na Júnior Empresa: ____ meses

7. Porque se candidatou à sua Júnior Empresa? (Quais foram as principais motivações?)
_____
_____
_____
_____

8. **Porque se mantém (ou manteve, no caso de alumni) na sua Júnior Empresa?**
_____
_____
_____
_____

9. Integração no trabalho

Os itens seguintes correspondem à sua perceção de integração no local de trabalho. Assinale (com um círculo ou uma cruz) a resposta que melhor descreve a sua atitude relativamente à organização onde trabalha, de acordo com a seguinte escala:

Discordo Totalmente	Discordo	Não concordo Nem discordo	Concordo	Concordo Totalmente
1	2	3	4	5

1. Sinto-me ligado/a a esta Júnior Empresa.	1	2	3	4	5
2. Seria para mim difícil deixar esta Júnior Empresa.	1	2	3	4	5
3. Estou demasiado envolvido/a nesta Júnior Empresa para a deixar.	1	2	3	4	5
4. Sinto-me vinculado/a a esta Júnior Empresa.	1	2	3	4	5
5. Simplesmente não conseguiria deixar a Júnior Empresa onde trabalho.	1	2	3	4	5
6. Seria muito fácil para mim deixar esta Júnior Empresa.	1	2	3	4	5
7. Estou intimamente ligado/a a esta Júnior Empresa.	1	2	3	4	5

10. Desempenho Organizacional:

Os itens seguintes procuram avaliar o seu desempenho no trabalho. Assinale (com um círculo ou uma cruz) até que ponto discorda ou concorda com cada afirmação. Utilize a seguinte escala:

Discordo Totalmente	Discordo	Discordo Moderadamente	Não concordo Nem discordo	Concordo Moderadamente	Concordo	Concordo Totalmente
1	2	3	4	5	6	7

Em comparação com outros empregados do mesmo nível:

1. … a quantidade do meu desempenho no trabalho é maior.	1	2	3	4	5	6	7
2. … a qualidade do meu desempenho no trabalho é melhor.	1	2	3	4	5	6	7
3. … a minha performance no trabalho é a mais elevada.	1	2	3	4	5	6	7
4. Contribuo em maior escala para a eficiência do meu departamento, em comparação com a maior parte dos colegas.	1	2	3	4	5	6	7

11. Satisfação:

Os itens seguintes procuram avaliar a sua satisfação no trabalho. Assinale (com um círculo ou uma cruz) até que ponto discorda ou concorda com cada afirmação. Utilize a seguinte escala:

Discordo Totalmente	Discordo	Discordo Moderadamente	Não concordo Nem discordo	Concordo Moderadamente	Concordo	Concordo Totalmente
1	2	3	4	5	6	7

1. Na maior parte dos dias, sinto-me entusiasmado com o meu trabalho atual.	1	2	3	4	5	6	7
2. Encontro um prazer verdadeiro no meu trabalho atual.	1	2	3	4	5	6	7
3. Em geral, gosto de trabalhar nesta Júnior Empresa.	1	2	3	4	5	6	7
4. Estou globalmente satisfeito com o meu trabalho nesta Júnior Empresa.	1	2	3	4	5	6	7

12. Conflito Trabalho-Família:

Seguem-se um conjunto de afirmações sobre os conflitos entre trabalho e família. Assinale com um círculo (ou uma cruz) até que ponto discorda ou concorda com cada afirmação. Utilize a seguinte escala (1 a 7):

Discordo Totalmente	Discordo	Discordo Moderadamente	Não concordo Nem discordo	Concordo Moderadamente	Concordo	Concordo Totalmente
1	2	3	4	5	6	7

1. As exigências do meu trabalho na JE interferem com a minha vida pessoal.	1	2	3	4	5	6	7
2. A quantidade de tempo que o meu trabalho na JE exige torna difícil lidar com as responsabilidades pessoais.	1	2	3	4	5	6	7
3. Não consigo fazer determinadas tarefas pessoais por causa das exigências do meu trabalho na JE.	1	2	3	4	5	6	7
4. O meu trabalho na JE provoca-me tensões que complicam a realização dos deveres pessoais.	1	2	3	4	5	6	7
5. Devido a exigências do trabalho na JE, tenho frequentemente de alterar os meus planos de atividades pessoais.	1	2	3	4	5	6	7
6. As exigências pessoais interferem com as atividades do meu trabalho na JE.	1	2	3	4	5	6	7
7. Tenho que adiar tarefas da JE por causa de compromissos pessoais.	1	2	3	4	5	6	7
8. Não consigo fazer determinadas tarefas na JE por causa das exigências pessoais.	1	2	3	4	5	6	7
9. A minha vida pessoal interfere com as responsabilidades na JE.	1	2	3	4	5	6	7
10. As tensões relacionadas com a vida pessoal interferem com o meu desempenho na JE.	1	2	3	4	5	6	7

13.1 Job design survey (Section I):

Muito pouco			Moderadamente			Muito
1	2	3	4	5	6	7

1. Até que ponto o desempenho do teu trabalho requer que trabalhes com outras pessoas (clientes ou colegas)?	1	2	3	4	5	6	7
2. O teu trabalho tem um carácter autónomo? Ou seja, em que medida é que o teu trabalho permite que sejas tu a decidir o modo como o desempenhas?	1	2	3	4	5	6	7
3. O trabalho que desempenhas tem princípio, meio e fim? Isto é, o teu trabalho perfaz um todo ou é posteriormente acabado ou continuado por colegas?	1	2	3	4	5	6	7
4. Nas funções que desempenhas existe variedade? O teu trabalho é variado ao ponto de necessitares de usar diversas aptidões para o seu desempenho?	1	2	3	4	5	6	7
5. Em termos gerais, que significância ou importância tem o teu trabalho? O resultado do teu trabalho afeta de maneira significativa o bem-estar das outras pessoas?	1	2	3	4	5	6	7
6. É frequente os teus superiores ou colegas te dizerem o quão bem estás a desempenhar o teu trabalho?	1	2	3	4	5	6	7
7. O trabalho em si dá-te algumas pistas acerca da tua performance (aparte do feedback que recebes de superiores ou colegas)?	1	2	3	4	5	6	7

13.2 Job design survey (Section II):

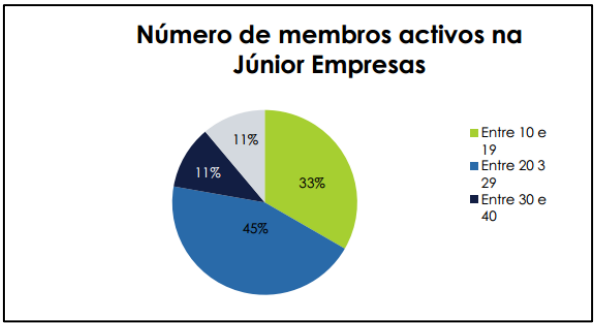
Em baixo encontra uma lista de frases que podem ser usadas para descrever um trabalho. Deverá indicar se cada frase é uma descrição correta ou incorreta do seu trabalho. Uma vez mais, tente ser o mais objetivo possível, independentemente de gostar ou não das funções que desempenha.

Totalmente incorreto	Incorreto em grande parte	Ligeiramente incorreto	Não tenho a certeza	Ligeiramente correto	Correto em grande parte	Totalmente correto
1	2	3	4	5	6	7

1. O meu trabalho requer que eu ponha em prática algumas capacidades elevadas.	1	2	3	4	5	6	7
2. As funções que desempenho requerem muita cooperação com outras pessoas.	1	2	3	4	5	6	7
3. O meu trabalho não me permite (pela maneira como foi concebido) desempenhar o processo produtivo do princípio ao fim.	1	2	3	4	5	6	7
4. O simples desempenho das funções inerentes ao meu trabalho dá-me várias oportunidades para perceber se o estou a fazer corretamente.	1	2	3	4	5	6	7
5. O meu trabalho é bastante simples e repetitivo.	1	2	3	4	5	6	7
6. O meu trabalho pode ser desempenhado adequadamente por uma pessoa sozinha, sem a consulta de outras pessoas.	1	2	3	4	5	6	7
7. Os meus colegas e superiores quase nunca me dizem que estou a fazer um bom trabalho.	1	2	3	4	5	6	7
8. Os resultados do meu trabalho podem afetar outras pessoas.	1	2	3	4	5	6	7

9. O trabalho não me dá oportunidade para usar a minha criatividade em relação ao modo como o devo desempenhar.	1	2	3	4	5	6	7
10. Os supervisores dizem-me muitas vezes quando acham que estou a fazer um bom trabalho.	1	2	3	4	5	6	7
11. O trabalho dá-me oportunidade de acabar aquilo que comecei.	1	2	3	4	5	6	7
12. O trabalho em sei dá-me poucas pistas em relação à qualidade do meu desempenho.	1	2	3	4	5	6	7
13. O meu trabalho proporciona-me uma independência e liberdade razoável em relação ao modo como o desempenho.	1	2	3	4	5	6	7
14. O meu trabalho não é muito importante no coletivo da organização.	1	2	3	4	5	6	7

13. Definition of the inquired population



(Source: JADE Portugal Census, 2012)

Number of members (class)	Reference Value
Less than 9 members	6
Between 10 and 19 members	16
Between 20 and 29 members	26
Between 30 and 40 members	36

(Source: Eloísa Ferreira, 2013)

Based on the data displayed above, and considering that in the Census were inquired 10 Portuguese Junior Enterprises, the number of Junior Entrepreneurs in 2012 can be defined based on the following.

Number of members (class)	Results	Reference Value	Number of JE's (2012)	Number of members (2012)
Less than 9 members	11%	6	1,1	6,6
Between 10 and 19 members	33%	16	3,3	52,8
Between 20 and 29 members	45%	26	4,5	117
Between 30 and 40 members	11%	36	1,1	39,6
Total	**100%**		**10**	**216**

So, since there is no information concerning the number of Junior Entrepreneurs in 2013 or its distribution across different classes, it is going to be assumed that the distribution remains the same as the one from the previous year. Therefore, the number of Portuguese Junior Entrepreneurs in 2013 is the following:

Number of members (class)	Results	Reference Value	Number of JE's (2013)	Number of members (2013)
Less than 9 members	11%	6	0,99	5,94
Between 10 and 19 members	33%	16	2,97	47,52
Between 20 and 29 members	45%	26	4,05	105,3
Between 30 and 40 members	11%	36	0,99	35,64
Total	**100%**		**9**	**195**

14. Characterization of the sample

14.1. Distribution of the sample by age (%)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	5	4,6	4,6	4,6
	19	13	11,9	11,9	16,5
	20	21	19,3	19,3	35,8
	21	28	25,7	25,7	61,5
	22	24	22,0	22,0	83,5
	23	11	10,1	10,1	93,6
	24	2	1,8	1,8	95,4
	25	3	2,8	2,8	98,2
	26	1	,9	,9	99,1
	32	1	,9	,9	100,0
	Total	109	100,0	100,0	

14.2. Measures of central tendency, regarding age

N	Valid	109
	Missing	0
Mean		21,17
Median		21,00
Mode		21

14.3. Role in Junior Enterprise and Management Function Crosstabulation

			Management Function		
			No	Yes	Total
Role in JE	Member	Count	61	31	92
		% within Role in JE	66,3%	33,7%	100,0%
		% within Management Function	87,1%	79,5%	84,4%
		% of Total	56,0%	28,4%	84,4%
	Alumni	Count	9	8	17
		% within Role in JE	52,9%	47,1%	100,0%
		% within Management Function	12,9%	20,5%	15,6%
		% of Total	8,3%	7,3%	15,6%
Total		Count	70	39	109
		% within Role in JE	64,2%	35,8%	100,0%
		% within Management Function	100,0%	100,0%	100,0%
		% of Total	64,2%	35,8%	100,0%

14.4. Role in Junior Enterprise and Role in JE's Founding Crosstabulation

			Founder		
			No	Yes	Total
Role in JE	Member	Count	82	10	92
		% within Role in JE	89,1%	10,9%	100,0%
		% within Founder	89,1%	58,8%	84,4%
		% of Total	75,2%	9,2%	84,4%
	Alumni	Count	10	7	17
		% within Role in JE	58,8%	41,2%	100,0%
		% within Founder	10,9%	41,2%	15,6%
		% of Total	9,2%	6,4%	15,6%
Total		Count	92	17	109
		% within Role in JE	84,4%	15,6%	100,0%
		% within Founder	100,0%	100,0%	100,0%
		% of Total	84,4%	15,6%	100,0%

14.5. Distribution of the Seniority (months) within the sample

		Frequency	Percent	Cumulative Percent
Valid	1	3	2,8	2,8
	2	8	7,3	10,1
	3	3	2,8	12,8
	4	1	,9	13,8
	5	1	,9	14,7
	6	3	2,8	17,4
	7	5	4,6	22,0
	8	7	6,4	28,4
	9	5	4,6	33,0
	10	2	1,8	34,9
	11	3	2,8	37,6
	12	21	19,3	56,9
	14	4	3,7	60,6
	15	2	1,8	62,4
	16	2	1,8	64,2
	17	2	1,8	66,1
	20	2	1,8	67,9
	24	22	20,2	88,1
	30	3	2,8	90,8
	36	6	5,5	96,3
	60	3	2,8	99,1
	72	1	,9	100,0
	Total	109	100,0	

Statistics

N	Valid	109
	Missing	0
Mean		16,28
Median		12,00
Mode		24

14.6. Distribution of the Levels of Seniority (months) within the sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 6 months (included)	19	17,4	17,4	17,4
	Between 6 and 12 months	43	39,4	39,4	56,9
	Between 12 and 18 months	10	9,2	9,2	66,1
	Between 18 and 24 months	24	22,0	22,0	88,1
	Between 24 and 30 months	3	2,8	2,8	90,8
	Between 30 and 36 moths	6	5,5	5,5	96,3
	Between 48 and 60 months	3	2,8	2,8	99,1
	Between 60 and 72 months	1	,9	,9	100,0
	Total	109	100,0	100,0	

14.7. Management Function and Role in JE's Founding Crosstabulation

			Founder		
			No	Yes	Total
Management Function	No	Count	67	3	70
		% within Management Function	95,7%	4,3%	100,0%
		% within Founder	72,8%	17,6%	64,2%
		% of Total	61,5%	2,8%	64,2%
	Yes	Count	25	14	39
		% within Management Function	64,1%	35,9%	100,0%
		% within Founder	27,2%	82,4%	35,8%
		% of Total	22,9%	12,8%	35,8%
Total		Count	92	17	109
		% within Management Function	84,4%	15,6%	100,0%
		% within Founder	100,0%	100,0%	100,0%
		% of Total	84,4%	15,6%	100,0%

15. Analysis of latent variables and psychometric properties of the instruments

15.1. Factor analysis of Job Embeddedness

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,853
Bartlett's Test of Sphericity	Approx. Chi-Square	377,094
	df	21
	Sig.	,000

KMO = 0,853 and Sig = 0,000 → variables related to Job Embeddedness have good correlations between them in the sample and it is inferred that there is multicollinearity in the population

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,080	58,292	58,292	4,080	58,292	58,292
2	,838	11,967	70,259			
3	,669	9,556	79,816			
4	,549	7,837	87,652			
5	,382	5,460	93,113			
6	,272	3,885	96,997			
7	,210	3,003	100,000			

Extraction Method: Principal Component Analysis.

The previous table shows that only one dimension should be considered, according to Kaiser Criterion.

15.2. Internal Consistency of Job Embeddedness' Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,700	7

15.3. Factor analysis of Work-Life Balance

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,825
Bartlett's Test of Sphericity	Approx. Chi-Square	558,017
	df	45
	Sig.	,000

KMO = 0,825 and Sig = 0,000 → variables related to Work-Life Balance have good correlations between them in the sample and it is inferred that there is multicollinearity in the population.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,284	42,842	42,842	4,284	42,842	42,842	3,595	35,949	35,949
2	2,363	23,627	66,469	2,363	23,627	66,469	3,052	30,520	66,469
3	,869	8,691	75,160						
4	,522	5,223	80,383						
5	,457	4,569	84,953						
6	,399	3,987	88,939						
7	,349	3,491	92,431						
8	,277	2,773	95,204						
9	,258	2,576	97,780						
10	,222	2,220	100,000						

Extraction Method: Principal Component Analysis.

The previous table shows that 2 dimensions should be considered, based on Kaiser Criterion.

	Component	
	Work-Family Conflict	Family-Work Conflict
1: WLB - The demands of my work interfere with my personal life	,857	,027
2: WLB - The amount of time my job takes up makes it difficult to fulfill personal responsibilities	,855	,079
3: WLB - Things I want to do at home do not get done because of the demands my job puts on me	,799	,112
4: WLB - My job produces strain that makes it difficult to fulfill personal duties	,786	,221
5: WLB - Due to work-related duties, I have to make changes to my plans for personal activities	,784	,099
8: WLB - Things I want to do at work don't get done because of the demands of my personal life	-,061	,850
9: WLB - My personal life interferes with my responsibilities at work	,125	,830
7: WLB - I have to put off doing things at work because of demands on my time at home	-,036	,803
6: WLB - The demands of my personal life interfere with work-related activities	,374	,756
10: WLB - Strains related to my personal life interferes with my ability to perform job-related duties	,312	,588

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

15.4. Internal Consistency of Work-Family Conflict's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,882	5

15.5. Internal Consistency of Family-Work Conflict's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,838	5

15.6. Factor analysis of Satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,805
Bartlett's Test of Sphericity	Approx. Chi-Square	226,704
	df	6
	Sig.	,000

KMO = 0,805 and Sig = 0,000 → variables related to Satisfaction have good correlations between them in the sample and it is inferred that there is multicollinearity in the population

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,922	73,046	73,046	2,922	73,046	73,046
2	,521	13,034	86,080			
3	,299	7,480	93,559			
4	,258	6,441	100,000			

Extraction Method: Principal Component Analysis.

The previous table shows that only one dimension should be considered, according to Kaiser Criterion.

15.7. Internal Consistency of Satisfaction's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,876	4

15.8. Distribution of Job Design's questions by dimensions

Dimensions	**Questions**
Skill Variety	Section I – Question 4 Section II – Question 1 Section II – Question 5 (Reversed scoring)
Task Identity	Section I – Question 3 Section II – Question 11 Section II – Question 3 (Reversed scoring)
Task Significance	Section I – Question 5 Section II – Question 8 Section II – Question 14 (Reversed scoring)
Autonomy	Section I – Question 2 Section II – Question 13 Section II – Question 9 (Reversed scoring)
Feedback from the job itself	Section I – Question 7 Section II – Question 4 Section II – Question 12 (Reversed scoring)
Feedback from agents	Section I – Question 6 Section II – Question 10 Section II – Question 7 (Reversed scoring)
Dealing with others	Section I – Question 1 Section II – Question 2 Section II – Question 6 (Reversed scoring)

15.9. Internal Consistency of Skill Variety's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,561	3

15.10. Internal Consistency of Task Identity's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,638	3

15.11. Internal Consistency of Task Significance's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,459	3

15.12. Internal Consistency of Autonomy's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,503	3

15.13. Internal Consistency of Feedback's Variables

Reliability Statistics

Cronbach's Alpha	N of Items
,769	6

15.14. Factor analysis of Job Design

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,753
Bartlett's Test of Sphericity	Approx. Chi-Square	869,634
	df	210
	Sig.	,000

KMO = 0,753 and Sig = 0,000 → variables related to Job Design have good correlations between them in the sample and it is inferred that there is multicollinearity in the population

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,003	28,586	28,586	6,003	28,586	28,586	2,853	13,586	13,586
2	2,110	10,046	38,632	2,110	10,046	38,632	2,638	12,561	26,146
3	1,869	8,898	47,530	1,869	8,898	47,530	2,365	11,261	37,407
4	1,255	5,976	53,506	1,255	5,976	53,506	2,135	10,166	47,574
5	1,108	5,275	58,781	1,108	5,275	58,781	2,002	9,534	57,108
6	1,011	4,816	63,597	1,011	4,816	63,597	1,363	6,489	63,597
7	,961	4,576	68,173						
8	,871	4,147	72,320						
9	,786	3,744	76,064						
10	,741	3,529	79,593						
11	,669	3,184	82,777						
12	,572	2,725	85,502						
13	,536	2,552	88,054						
14	,482	2,296	90,350						
15	,453	2,156	92,506						
16	,428	2,038	94,544						
17	,314	1,494	96,038						
18	,255	1,216	97,255						
19	,235	1,118	98,373						
20	,185	,880	99,253						
21	,157	,747	100,000						

Extraction Method: Principal Component Analysis.

The previous table shows that six dimensions should be considered. Therefore, when analyzing the table on the next page, it is possible to conclude that the dimensions would group the original variables in a way that is completely different from the original model.

Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
II.4 - Just doing the work required by the job provides many chances for me to figure out how well I am doing	,769					
I.7 - To what extent does doing your job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing it, aside from any feedback of other people?	,762					
R.II.12 - The job itself provides very few clues about whether or not I am performing	,555					
I.4 - How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?	,529					
I.2 - How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?	,503					
II.1 - The job requires me to use a number of complex or high level skills	,499					
R.II.5 - The job is quite simple and repetitive		,734				
R.II.6 - The job can be done adequately by a person working alone, without talking or checking with other people		,700				
R.II.9 - The job denies me any chance to use my personal initiative or judgment in carrying out the work		,689				
R.II.14 - The job itself is not very significant or important in the broader scheme of things		,613				
II.10 - Supervisors often let me know how well they think I am performing the job			,869			
I.6 - To what extent do managers or co-workers let you know how well you are doing on your job?			,764			
R.II.7 - The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work			,697			
II.2 - The job requires a lot of cooperative work with other people				,756		
I.1 - To what extent does your job require you to work closely with other people?				,735		
II.8 - This job is one where a lot of other people can be affected by how well the work gets done				,563		
R.II.3 - The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end					,728	
I.3 - To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end or does it need to be finished by other people?					,681	
II.11 - The job provides me the chance to completely finish the pieces of work I begin					,598	
I.5 - In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?					,433	
II.13 - The job gives me considerable opportunity for independence and freedom in how I do the work						,768

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 11 iterations.

16. Validation of the research model (and its hypotheses)

16.1. Normality of random errors of both MLRM

Model 1

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	,043	109	,200*	,987	109	,366

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Since N > 50 → Kolmogorov-Smirnov

- *Value of the test statistic*: 0,043
- *Decision*: 0,200 > 0,05 → Do not reject the null hypotheses
- *Conclusion*: there is statistical evidence to support the null hypotheses that the population random errors follow a normal distribution

Model 2

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	,065	109	,200*	,979	109	,076

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Since N > 50 → Kolmogorov-Smirnov

- *Value of the test statistic*: 0,065
- *Decision*: 0,200 > 0,05 → Do not reject the null hypotheses
- *Conclusion*: there is statistical evidence to support the null hypotheses that the population random errors follow a normal distribution

16.2. Correlation between the random errors of both MLRM

Model 1

Model	Durbin-Watson
1	1,950

a. Predictors: (Constant), FWC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

- $\underline{d}$ = 1,950 → d ≈2 → $\hat{\rho} \approx 0$
- *Conclusion*: The errors are not correlated, as it was expected since this data base is not time series data

Model 2

Model	Durbin-Watson
1	2,045

a. Predictors: (Constant), WFC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

- $\underline{d}$ = 2,045 → d ≈2 → $\hat{\rho} \approx 0$
- *Conclusion*: The errors are not correlated, as it was expected since this data base is not time series data

16.3. Independence of both MLRM's explanatory variables

Model 1	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
JobEmbeddedness	,643	1,555
Satisfaction	,670	1,492
FWC	,872	1,147

Tolerance > 0,1

Variance Inflation Factor (VIF) < 10

Conclusion: there is no collinearity between the two independent variables

Model 2	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
JobEmbeddedness	,679	1,473
Satisfaction	,674	1,484
WFC	,985	1,015

Tolerance > 0,1

Variance Inflation Factor (VIF) < 10

Conclusion: there is no collinearity between the two independent variables

16.4. Estimation of the Multiple Linear Regression Model

Model 1: Job Embeddedness, Satisfaction, Family-Work Conflict and Performance

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,553	,701		,789	,432
JobEmbeddedness	,089	,128	,078	,693	,490
Satisfaction	,468	,152	,340	3,071	,003
FWC	,113	,110	,100	1,031	,305

Dependent Variable: Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,371[a]	,137	,113	,77739

a. Predictors: (Constant), FWC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,106	3	3,369	5,574	,001[a]
	Residual	63,455	105	,604		
	Total	73,561	108			

a. Predictors: (Constant), FWC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}^{*} = \underset{(0,432)}{0,553^{*}} + \underset{(0,003)}{0,468}\ \text{Satisfaction}^{*}$

16.5. Estimation of the Multiple Linear Regression Model

Model 2: Job Embeddedness, Satisfaction, Work-Family Conflict and Performance

Model 2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,497	,559		,889	,376
JobEmbeddedness	,052	,121	,046	,429	,669
Satisfaction	,412	,147	,300	2,806	,006
WFC	,256	,089	,256	2,894	,005

Dependent Variable: Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	,439[a]	,193	,170	,75189

a. Predictors: (Constant), WFC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

ANOVA[b]

Model 2	Sum of Squares	df	Mean Square	F	Sig.
Regression	14,200	3	4,733	8,372	,000[a]
Residual	59,361	105	,565		
Total	73,561	108			

a. Predictors: (Constant), WFC, Satisfaction, JobEmbeddedness
b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}$* = 0,497* + 0,412 Satisfaction* + 0,256 Work-FamilyConflict*
(0,376) (0,006) (0,005)

16.6. Estimation of the Simple Linear Regression Model

Model 3: Job Embeddedness and Performance

Model 3	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,070	,431		4,809	,000
JobEmbeddedness	,268	,107	,237	2,520	,013

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	,237[a]	,056	,047	,80559

a. Predictors: (Constant), JobEmbeddedness

b. Dependent Variable: Performance

ANOVA[b]

Model 3	Sum of Squares	df	Mean Square	F	Sig.
Regression	4,121	1	4,121	6,350	,013[a]
Residual	69,440	107	,649		
Total	73,561	108			

a. Predictors: (Constant), JobEmbeddedness

b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}^{*} = \underset{(0,000)}{2,070^{*}} + \underset{(0,013)}{0,268}\ \text{JobEmbeddedness}^{*}$

16.7. Estimation of the Simple Linear Regression Model

Model 4: Work-Family Conflict and Performance

Model 4	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,339	,261		8,967	,000
Dimension_WFC	,296	,093	,295	3,198	,002

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
4	,295[a]	,087	,079	,79215

a. Predictors: (Constant), WFC

b. Dependent Variable: Performance

ANOVA[b]

Model 4	Sum of Squares	df	Mean Square	F	Sig.
Regression	6,417	1	6,417	10,227	,002[a]
Residual	67,144	107	,628		
Total	73,561	108			

a. Predictors: (Constant), Dimension_WFC

b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}$* = 2,339* + 0,296 Work-FamilyConflict*
(0,000) (0,002)

16.8. Estimation of the Simple Linear Regression Model

Model 5: Satisfaction and Performance

Model 5	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1,065	,531		2,006	,047
Satisfaction	,490	,124	,356	3,943	,000

a. Dependent Variable: Performance

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
5	,356[a]	,127	,119	,77478

a. Predictors: (Constant), Satisfaction

b. Dependent Variable: Performance

ANOVA[b]

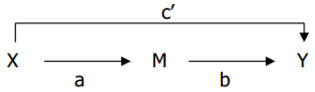
Model 5	Sum of Squares	df	Mean Square	F	Sig.
Regression	9,331	1	9,331	15,544	,000[a]
Residual	64,230	107	,600		
Total	73,561	108			

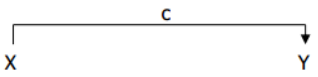
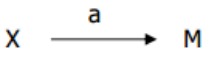
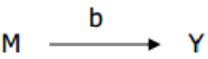
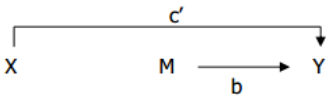
a. Predictors: (Constant), Satisfaction

b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}^{*}$ = 1,065* + 0,490 Satisfaction*
(0,047) (0,000)

16.9. Testing for mediation



	Analysis	Visual Depiction
Step 1	Conduct a simple regression analysis with X predicting Y to test for path c alone, $Y = B_0 + B_1X + e$	
Step 2	Conduct a simple regression analysis with X predicting M to test for path a, $M = B_0 + B_1X + e$	
Step 3	Conduct a simple regression analysis with M predicting Y to test the significance of path b alone, $M = B_0 + B_1M + e$	
Step 4	Conduct a multiple regression analysis with X and M predicting Y, $Y = B_0 + B_1X + B_2M + e$	

Source: Baron and Kenny, 1986

16.10 Estimation of the Simple Linear Regression Model

Model 6: Job Embeddedness and Satisfaction

Coefficients[a]

Model 6	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,372	,265		8,941	,000
JobEmbeddedness	,467	,066	,566	7,109	,000

a. Dependent Variable: Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
6	,566[a]	,321	,314	,49638

a. Predictors: (Constant), JobEmbeddedness

b. Dependent Variable: Satisfaction

ANOVA[b]

Model 6	Sum of Squares	df	Mean Square	F	Sig.
Regression	12,454	1	12,454	50,544	,000[a]
Residual	26,364	107	,246		
Total	38,818	108			

a. Predictors: (Constant), JobEmbeddedness

b. Dependent Variable: Satisfaction

Estimated regression model: $\widehat{Satisfaction}^{*} = \underset{(0,000)}{2,372^{*}} + \underset{(0,000)}{0,467}\ \text{JobEmbeddedness}^{*}$

16.11 Estimation of the Multiple Linear Regression Model

Model 7: Job Embeddedness, Satisfaction and Performance

Coefficients[a]

Model 7	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1,003	,549		1,826	,071
JobEmbeddedness	,058	,125	,051	,468	,641
Satisfaction	,450	,151	,327	2,972	,004

a. Dependent Variable: Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
7	,359[a]	,129	,112	,77762

a. Predictors: (Constant), Satisfaction, JobEmbeddedness

b. Dependent Variable: Performance

ANOVA[b]

Model 7	Sum of Squares	df	Mean Square	F	Sig.
Regression	9,463	2	4,732	7,825	,001[a]
Residual	64,098	106	,605		
Total	73,561	108			

a. Predictors: (Constant), Satisfaction, JobEmbeddedness

b. Dependent Variable: Performance

Estimated regression model: $\widehat{Performance}^{*} = \underset{(0,071)}{1,003^{*}} + \underset{(0,004)}{0,450}\ \text{Satisfaction}^{*}$