Companies are currently required to continually innovate and restructure their operations in order to respond to the requirements of national and international competition. Companies have to find new ways to develop competitive advantages and acquire new skills, resources and capabilities.

Since the 90’s, the research on international new ventures (INV) contested the idea that new or small companies can’t be early internationalized or that they would only do so incrementally. Since then, a growing flow of research into international new ventures has tried to understand the causes, processes, and outcomes of the decision to early enter foreign markets. A common thread concerns the role of learning and knowledge. Organizational knowledge, or its absence, was a central explanation for internationalization in original stage-based models (Uppsala School), but INV theory recognized that individual factors such as international experience can also influence the pace and specially the beginning of internationalization. More specifically, some recent empirical evidence offers important insights into the internationalization of new business, showing that younger companies are able to compensate for their limited experiential learning through previous individual experiences of the top management team and through inter-organizational relationships.

Based on our literature review we intend to evaluate entrepreneurs’ opinions, in order to ascertain whether factors such as a relational network, worker’s specific skills and worker’s international experience, can act as enhancing agents or inducers of the company internationalization process. Moreover we intend to investigate if there are differences in the importance of these factors to those companies that internationalize early in their life cycle (maturity level).

An empirical study was carried out with 320 Portuguese companies through Exploratory Analysis and Univariate Statistical Inference methodologies.

We found evidence that allows us to say that companies that internationalize early in their life cycle are those which most value the importance of worker’s specific skills and worker’s international experience. However relational networks don’t depend on companies’ maturity level.

Keywords: Internationalization, skills, networks.

1 INTRODUCTION

Literature on new firms internationalization process have been dominated by two main theoretical models. The first model is the Internationalization Process Theory, initially developed in the works of [1] [2] and [3]. The second is the International New Ventures model (INV), first proposed by [4] and [5].

According to the internationalization process theory, companies enter new markets gradually, slowly compromising their resources in the development of export activities. The process thus progresses in stages, as firms start to develop locally before expanding to foreign markets [6].

The international new ventures model (INV), on the other hand, states that some young SME’s rapidly internationalize, exporting to distant markets practically since birth. Thus, instead of following a gradual internationalization process, these firms enter international trade almost immediately, without waiting until they have acquired experience in the domestic market.

The growing popularity of this new perspective on international new ventures has created a body of literature on this issue of the beginning of internationalization. A growing flow of research into international new ventures has sought to understand the causes, processes and outcomes of the decision to early enter foreign markets. A common thread concerns the role of learning and knowledge
Organizational knowledge or experience, or their absence was a central explanation for internationalization in original, stage-based models and to this perspective, behavioral view of internationalization. However, recognized that individual factors, such as international experience, can also influence the pace and the beginning of internationalization. The perspective on international new ventures thus emphasizes the role of individual knowledge to argue that international ventures do not need organizational experiences, routines or capabilities to enter earlier in their first external market. On the contrary, the past experiences of founders and other key managers can replace such shortcomings and this approach is called strategic choice view by . According to the network theory, depending on the position of a company in the network, this will define its range of opportunities and constraints and thus develop its strategies. report that these relationships have a strong impact on market selection as well as on entry mode because they easily identify and exploit new opportunities. According to cooperation networks undoubtedly favour the competitiveness of companies and have become an important tool to support SME’s internationalization. states that potentially conflictive relationships and divergent interests are seen as collaborative partnerships around a common goal: internationalization. and argue that networks are even more important for SME’s due to their lack of human, technical and financial resources, in order to be able to internationalize their operations on their own. Integration into a network is likely to strengthen the competitiveness of these companies in the international market. Being a member of a network provides a variety of technical, financial, and perhaps even more important, knowledge about the external market enabling a reduction in the risks of psychological distance.

make another approach to the importance of knowledge in Network Theory. These authors give us a different perspective on this theory and that fits into the so-called Attention Based View. The established networks contribute effectively to build the knowledge base of a company, which in turn establishes the bases to recognize and value international opportunities. Although several international exposure sources may be present in the external environment, according to the so-called "limited rationality" of Attention-based View the different network relations can thus provide entrepreneurs with support in order to direct their attention to the international opportunities most appropriate to the situation of each company.

Another perspective is the motivation that an entrepreneur directs towards the internationalization that has also been attributed, as we have seen, to external forces. Proponents of the Population Ecology Approach argue that external forces such as competition and also specific personality traits lead the entrepreneur to seek other opportunities in foreign markets. According to to get a better understanding of the entrepreneur's decision to internationalize, we must understand his mind and its entrepreneurial characteristics. In fact, many schools of thought portray the entrepreneur as an individual driven by a number of environmental factors and also by personality traits. Research on entrepreneurship has identified a number of traits associated with entrepreneurs, such as the need for achievement, the propensity to take risks, the locus of control or self-confidence, and tolerance to contexts of uncertainty. It has also been argued that the choice of an entrepreneurial career is related to external factors such as culture.

Evidence from some empirical studies also reveals that the company's own size has an impact on the internationalization decision, namely on the entry mode. Smaller companies, lacking the resources and experience to venture into foreign markets, prefer entry modes with shared. Therefore, the constraints faced by small companies oblige them to seek solutions that minimize risks and the degree of commitment and to use partnerships to internationalize.

2 THEORETICAL MODEL

Based on the theoretical review summarized in chapter 1, it was established the theoretical model on which this empirical study will be based. We decided to focus our attention on the following driving factors entrepreneurial internationalization: Relational networks and variables related to Experience/Skills: Specific skills of the collaborators/employees which we will consider as the first group of Endogenous Variables.

We also decided to include some important variables, taken from the previous theoretical review, which could contribute to differentiate the companies into different groups. In order to do this we
include the company age [4] [32] [22] and [34] and the company size [35] [36] [37] and [28]. This will be the second group of Endogenous Variables.

3 METHODOLOGY

Based on the opinions of different Portuguese entrepreneurs, this study seeks to determine the importance attributed to several factors considered as inducers of the internationalization process by companies that are internationalized early in their life cycle. For example, factors such as a relational network, personal characteristics and acquired skills of entrepreneurs and employee’s international experience can act as empowering or inducing agents for the company internationalization process.

In order to achieve the objectives propose, we decided to test the following investigation hypotheses, which we extract from our theoretical model:

**HA:** The degree of importance attributed by the entrepreneurs to the variables presented depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years);

And more concretely:

- **HA.1:** The degree of importance attributed to Employees International Experience depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years);
- **HA.2:** The degree of importance attributed to Employees Specific Competences depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years);
- **HA.3:** The degree of importance attributed to Relational Networks depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years);
- **HA.4:** Companies with an early internationalization assign greater importance to International Experience of Employees than companies that have a later internationalization;
- **HA.5:** Companies with an early internationalization assign greater importance to Employees Specific Skills of Employees, than companies that have a later internationalization;
- **HA.6:** Companies with an early internationalization assign greater importance to relational networks than companies that have a later internationalization;
- **HA.7:** The degree of importance attributed by the entrepreneurs to the other variables (in particular Company age) depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years).

**HB:** Companies that consider Employees International Experience as an important factor also consider Relational Networks (formal / informal) as important for their internationalization.

To reach these objectives, we choose a quantitative approach and use as a research instrument a questionnaire survey entitled: "Factors that contribute to the effectiveness of a company’s internationalization". In structural terms, the questionnaire was divided into two parts:

1 Questions about the general characteristics of the company and also about its insertion in the international market;
2 Questions about the factors with the greatest impact on internationalization.

In the second part all variables were chosen based on the review of the literature and already and referenced in the theoretical model. The questionnaire was sent by e-mail to the exporting companies and/or interested in exporting (study population) of the AICEP-Portugal Global Database. The survey was publicized from April 15 to December 31, 2013.

We were able to collect a total of 320 valid answers (sample), in a total of 8103 companies (study population), or approximately 4% response rate.

Based on the obtained answers, we verified that almost 50% of respondents can be considered as early internationals, since they have internationalized at most with 6 years of age (less than 7 years).
In the survey, an ordinal scale was used for the respondents to assign a classification to the different items according to the 5-point Likert scale (importance scale), consistent with studies by [38] [39] and [40]. The classification categories are: "not important", "unimportant", "moderately important", "very important" and "extremely important". The type of ordinal scale used in our questionnaire is classified by [41] as a rating scale.

The data collected from April to December 2013 was analysed using a combination of simple statistical techniques with multivariate statistical techniques using the statistical software SPSS (Statistical Package for Social Sciences), which is the most used by researchers in the social sciences according to [42].

Given the nature of the database to be explored and the research objectives, we used Univariate Statistical Inference methodologies (here confirmatory inferential analyses were performed with hypothesis tests appropriate to the variables in study and multiple comparisons of means, according to [42]).

4 INFERENTIAL ANALYSIS - CONTINGENCY TABLES - ASSOCIATION BETWEEN VARIABLES

4.1 International maturity of the company vs. employers international experience

In order to assess whether the degree of importance assigned to the Employee International Experience depends on the degree of International Maturity of Company (early internationalization (≤6 years) vs. later internationalization (> 6 years)), we used the Chi-square independence test ($X^2$), followed by Fisher test. A probability of type I error ($\alpha$) of .05 was considered.

Our statistical hypotheses are $H_0$: The importance assigned to the Employees International Experience is independent of the degree of International Maturity of Company vs. $H_1$: The emphasis on International Experience of employees is not independent of the degree of International Maturity of Company.

In order to strictly implement the Chi-square independence test ($X^2$) we have to check the three following conditions: i) N> 20; ii) all $E_{ij}$ is greater than 1; iii) at least 80% of $E_{ij}$ are greater than 5 (Maroco 2011, p. 104).

The "minimum expected $E_{ij}$ is 0.98" which violates the 2nd condition. For this reason was then performed the Fisher test. The Fisher’s exact test is a nonparametric test that can be used to compare two or more independent samples of small dimension as a qualitative variable. This test can be used instead of the ($X^2$) test when this one should not be applied [42].

As we want to test the same hypothesis as the ones on ($X^2$) test, and as the probability of significance to the bilateral Fisher test ("Exact Sig. 2-sided") is $= 0.000$, we reject the $H_0$ hypothesis that the importance attached to the Employees international experience is independent of the degree of International Maturity of the Company, so we conclude that the importance attributed to the Employees International Experience depends on the degree of International Maturity of the Company.

In point 5, when analysing the non-parametric tests, we will test the hypothesis that companies with an early internationalization (group 1) attribute greater importance to the Employees International Experience than companies with later internationalization (group 2).

4.2 International maturity of the company vs. employees specific competencies Subsection

To evaluate if the degree of importance assigned to the employees specific competences depends on the degree of International maturity of the company we apply the Chi-square independence test ($X^2$), followed by Fisher test. A probability of type I error ($\alpha$) of .05 was considered.

Our statistical hypotheses are $H_0$: The importance attached to the Employees Specific Skills is independent of the degree of International Maturity of the Company vs. $H_1$: The importance attached to the specific competences of the employees is not independent of the degree of International Maturity of the Company.
One of the results was that there are "3-cell (30%) with less than 5 Ej" which violates the 3rd condition of applicability of the \(X^2\) test. For this reason we performed then the Fisher test.

Since the probability of significance to the bilateral Fisher test ("Exact Sig.2-sided") is \(=.015\), we reject \(H_0\) hypothesis that the importance attached to the Employees Specific Skills is independent of the degree of International Maturity of the Company, that is, the importance attributed to the Employees Specific Competences depends on the degree of International Maturity of the Company.

Later on, when analysing non-parametric tests, we will test the hypothesis that companies with an early internationalization (group 1) attribute greater importance to the Employees Specific Competences than companies with later internationalization (group 2).

### 4.3 International maturity of the company vs. contacts network in the host country

To evaluate the degree of importance attributed to the Contacts Network in the Host Country depends on the degree of International Maturity of the Company we apply the Chi-square independence test \(X^2\). A probability of type I error (\(\alpha\)) of \(.05\) was considered.

Our statistical hypotheses are \(H_0\): The importance attributed to the Contacts Network in the Host Country is independent of the degree of International Maturity of Company vs. \(H_1\): The importance attributed to the Contacts Network in the Host Country is not independent of the degree of International Maturity of Company.

The applicability conditions of \(X^2\) test are ensured. However, as the probability of significance for the \(X^2\) test bilateral ("Exact Sig. 2-sided") is \(=.530\), we retain hypothesis \(H_0\) and concluded that the importance attached to Contacts in the Host Country is independent of the degree of International Maturity of the Company.

## 5 NON PARAMETRIC TESTS FOR MEAN COMPARISON (WILCOXON-MANN-WHITNEY TEST)

The Wilcoxon-Mann-Whitney test, or simply Mann-Whitney's test, is a nonparametric test appropriate to compare the distribution of functions of at least one ordinal variable measured in two independent samples [42]. This test can also be used as an alternative to the t-Student test (used to test whether the mean of two populations are not significantly different [42]), namely when the assumptions of this test are not valid (for example, heterogeneous variances and biased).

To study the effect of International Maturity of Companies (early internationalization (\(\leq\) 6 years) vs later internationalization (> 6 years), according to [43]) on the classification of the importance of the dependent variables that we are studying, companies were separated into 2 groups (1 Early-internationals; 2 No early-internationals). In order to assess whether the international maturity significantly affected the opinion of entrepreneurs on the importance of different variables we proceeded to Wilcoxon-Mann-Whitney test (nonparametric test) as described in [42]. We used the software SPSS (v.20, SPSS, Chicago, IL). Group 1 and 2 will be needed later to compare the means of orders. It was considered an error probability of type I (\(\alpha\)) of \(.05\).

The Mann-Whitney test indicates that there are significant differences between the two groups of companies (Asymp. Sig. (2-tailed)), for the variables Company size (\(p = .006\)), Company Age (\(p = .006\)), Employees specific skills (\(p = .024\)) and Employees international experience (\(p = .001\)).

In the following step we compared the average of orders for comparison the two groups of companies.

#### Average of Orders Comparison

The hypothesis that companies with early Internationalization (X1) attribute less importance (measured on an ordinal scale of 1-nothing important 5 - extremely important) to variables such as Company Age and Company Size, and most important variables such as Employees Specific Skills and Employees International Experience compared with companies with later Internationalization (X2) was evaluated by nonparametric Wilcoxon-Mann-Whitney test, followed by comparison of the means of orders. All hypotheses were confirmed, as can be verified by the following analyses.

Once the differences are statistically significant the comparison of the means of orders shows the following results:
Company Age:
Since the average of the orders for the sample of companies with early internationalization (145.02) is lower than the average of the orders for the sample of companies with later internationalization (172.21), Exact Sig. (Exact Sig. (1-tailed)) reported by SPSS is for the unilateral test left with H1: F (X1) < F (X2). Being \( p_{EU} = .003 < \alpha = .05 \) reject H0: F (X1) ≥ F (X2), concluding that the degree of importance attributed to the Company Age by companies with early internationalization is lower than assigned by companies with later internationalization, which seems quite logical.

Company size:
Also for this variable is true that the average of the orders for the sample of companies with early internationalization (143.68) is lower than the average of the orders for the sample of companies with later internationalization (170.46), Exact Sig. (Exact Sig. (1-tailed)) reported by SPSS then is for the unilateral left test with H1: F (X1) < F (X2). Being \( p_{EU} = .003 < \alpha = .05 \) reject H0: F (X1) ≥ F (X2), concluding that the degree of importance attributed to the Company size by companies with early internationalization is lower than assigned by companies later internationalization, which seems also quite acceptable.

Employees Specific Skills:
Since the average of the orders for the sample of companies with early internationalization (171.54) is greater than the average of the orders for the sample of companies with later internationalization (150.00), the Exact Sig. (Exact Sig. (1-tailed)) reported by SPSS is to the unilateral right test to H1: F (X1) > F (X2). Being \( p_{EU} = .012 < \alpha = .05 \) reject H0: F (X1) ≤ F (X2), concluding that the degree of importance attributed to specific competences of employees by companies with early internationalization is greater than that allocated by companies with later internationalization, as we predicted.

Employees International Experience:
Regarding employees international experience, as the average of the orders for the sample of companies with early internationalization (176.38) is also in this case, higher than the average of the orders for the sample of companies with later internationalization (144.33), Exact Sig. (Exact Sig (1-tailed)) reported by SPSS is also for the unilateral right test with H1: F (X1) > F (X2). Being \( p_{EU} = .000 < \alpha = .05 \) reject H0: F (X1) ≤ F (X2), concluding that the degree of importance assigned to the Employees International Experience by companies with early internationalization is greater than that allocated by companies with later internationalization, as originally supposed.

6 CONCLUSIONS
Based on the research hypotheses derived from our theoretical model defined in chapter 2, we analyse the results of the survey in order to confirm that the most important factors considered as inducers of the internationalization process are within the chosen theoretical model (with special emphasis on the variables related to the Relational Networks and the variables related to the Experience/Skills) and try to ascertain if the importance assigned to the chosen variables depends on the International Maturity of the Company.

With respect to HA: The degree of importance assigned by the entrepreneurs to the presented variables depends on the degree of International Maturity of the Company (early internationalization (≤ 6 years) vs. later internationalization (> 6 years), the results indicate that:

- The importance attributed to the Employees International Experience depends on the degree of International Maturity of the Company;
- Companies with an early internationalization attribute a greater degree of importance to the Employees International Experience relatively to companies with a later internationalization.
- The importance attributed to the Employees Specific Competences depends on the degree of International Maturity of the Company;
- Companies with early internationalization assign a superior degree of importance to the Employees Specific Competences when compared to companies with later internationalization.
- The importance attributed to the Contacts Network in the Host Country is independent of the degree of International Maturity of the Company, so we can, along with the descriptive analysis
of the data, state that regardless of the degree of International Maturity of the Company, all companies attach large importance to the Contacts Network in the Host Country.

As for HB, companies that consider the employees international experience as an important factor also consider Relational networks (formal/informal) as important to its internationalization, the results showed that:

- The companies that attach greater importance to the Employees International Experience are also those that consider the Network of Contacts in the Host Country more important.

The presented analysis is part of a broader study from the perspective of entrepreneurs and managers on internationalization and on what factors they consider as the most important for the company’s internationalization. Based on the results presented here, future work will seek to study a larger sample and most representative of all sectors of activity, which will analyse more clearly the opinions of entrepreneurs in specific sectors and even compare them with the entrepreneurs from other sectors.

REFERENCES


