Entrepreneurial Intent: Contribution to Study the Determinants among Students Participating in Entrepreneurial Competition Projects

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Abstract Entrepreneurial intent is a determining factor in entrepreneurship. It precedes the behavioral act of developing one’s own business. Developing entrepreneurial intent requires gathering a number of necessary but not sufficient conditions. The present study will try to identify, based on a quantitative study conducted among 120 students involved in entrepreneurial competition projects organized in the city of Agadir (Morocco), the determinants of entrepreneurial intent. The arithmetic mean of 15 variables identified by literature review and interviews was calculated. The (t) test, principal component and regression analysis were used to classify, categorize and measure the links between the variables. The results indicate that the top five entrepreneurial intent determinants are Self-confidence, Self-Efficacy, Motivation, Technical and Technological Skills, Goal of fulfillment. The most important category of determinants is related to the attitudes and behaviors of students compared with the category of technical and professional factors and also the category of factors related to the family and social environment. These results can contribute to the entrepreneurship development in the city of Agadir (Morocco) by helping students to create their own business and therefore minimize unemployment.

Keywords Entrepreneurial Intent, The Determinants of Entrepreneurial Intent, Entrepreneurial Competition Projects

1. Introduction

The entrepreneurship remains the important instruments of the new development model in Morocco. Based on the liberation of energy and human development, the new development model has contained many policies, strategies and programs to encourage entrepreneurship. The World Bank greets the new development model because it could be the solution for reducing job unemployment. The entrepreneurship is qualified by the eminent authors in the field [20, 21, 39, 40], a source of wealth and a job creation [19]. The concept has been defined by the authors as the discovery of opportunities [35, 37] or as a process of developing an organization [25, 26, 35] and also by the relationship between the individual and the values’ creation [14, 35]. Having been aware about the importance of entrepreneurship to create wealth, decision-makers in Morocco encourage more and more the entrepreneurial training among students. The “entrepreneurial training” could help individuals to create more effective relationship with entrepreneurship and inspire them to create their own business. The European Commission, for an example, highlights in its 2004 report the importance of an entrepreneurial education to encourage the young
entrepreneurs [18]. Morocco, for its part, has been aware for the past twenty years of the importance to encourage the entrepreneurial spirit of young people through teaching and national education. Thus, entrepreneurial training has developed either by the incubation of projects within universities or by programs introduced in educational programs; also it has developed through the entrepreneurial competitions organized by universities in a partnership with socio-economic organizations. Entrepreneurship education could be a solution to develop the entrepreneurial intent among students [31]. In addition, it allows the development of the necessary values and behaviors for evolving an entrepreneurial personality [22]. The literature dealing with this phenomenon of entrepreneurship could be classified into two categories: a category about issues based on the analysis of the way or the process that leads to the entrepreneurial act (the behavior of entrepreneurship and its evaluation) and a category of work focused on the analysis of the entrepreneur’s personality. From a process perspective, the analysis focuses on effective and efficient management criteria for each stage of the process. However, from a “personality” perspective, the approaches consider entrepreneurship as a result of psychological, cognitive and sociological attitudes. These are different factors influencing the individual’s perception of entrepreneurship and therefore his or her desire to accomplish or not to perform his or her entrepreneurial act. Of course, many researches have been done in the field of entrepreneurship, and they have studied the personality of the entrepreneur and especially the entrepreneurial intent, however few have studied the case of students involved in entrepreneurial competition projects. These participants are exposed to extreme conditions of an innovation and creativity experience; the specific know-how can generate or inhibit entrepreneurial intent. The purpose of this paper is to show that the entrepreneurial intent of students involved in entrepreneurial competition projects is determined by numerous factors specific to the individual and others coming from those around him. It could be an answer to the following question: What are the determinants of the entrepreneurial intent of students involved in entrepreneurial competition projects? We assumed that the determinants of entrepreneurial intent are identified by behavioral, technical, social and family order (H 1). Also, the identified determinants do not all have the similar degree of importance (H2). First; we will begin by exposing the conceptual framework by expounding the key theories addressing the topic of entrepreneurial intent Determinant. Next we will present the results of a quantitative study conducted in Agadir city (Morocco).

2. Literature Review

2.1. Entrepreneurial Intent Concept

Entrepreneurial intent remains a complex concept. Its nature refers to the understanding of purely psycho-cognitive state of the mind that results from the representations made by individuals. Its content divides the scientific community between an intention of a realization and an intention of a pre-realization of the entrepreneurial project (the intention of the attention). Despite the abundance of scientific research addressing the subject, it remains complex to acquire a universal connotation [17, 27, 23, and 43]. The following table 1 presents some definitions considered relevant by the scientific community:

| Concept / Definitions | Close concepts | Authors |
|------------------------|----------------|---------|
| Intention has a sense of prediction. | Intention of the intention to do | [24] |
| Intention has a sense of psychological power. | An individual will, a freedom, a state of mind. | [11,12,14,20] [28,29,46] |
| Intention is a process triggered by the environment of the individual. | Evolution of a state of mind. Detection of business opportunity. | [11,12,33] |
| Intention has a sense of development and concretization. | Judgment on a possibility of future creation. | [17] |

The concept of entrepreneurship according to three acceptances evolving through the entrepreneurial life cycle was developed by Authors [35]. The first is related to the power of business opportunities detection and the flair to seize opportunities by the future entrepreneurs. The second is the category of the entrepreneurial process concerned by the development and realization of the business plan. As for the third connotation, it is the evaluation of the relationship between the individual and the value creation. The three acceptances explained by Authors [35] were developed on the basis of elements proposed by Authors [34, 35, 23]. Entrepreneurial intent refers to distinct mental and psychological situations and states during the entrepreneurial life cycle. To better understand this phenomenon, the four phases of the business creation process based on the PIDA model (Entrepreneurial Propensity, Entrepreneurial intent, Entrepreneurial Decision, and Entrepreneurship Act) were exposed [43]. Indeed, each component of the model on the basis of its relation with the following state was explained [43]. A trajectory that begins with a tendency or propensity towards the temptation of the entrepreneurial adventure was defined by the Authors. It was the result of the combination of personal and professional characteristics [36]. Entrepreneurial intent depends on a conative phase linked to the existence of more or less formalized ideas or projects and the search for information and advices [43]. This phase mentions the decision-making that could be operationalized by a validated business plan. The entrepreneurial act is the project concretized by the validation of its resources and the effective start of material activity and the production of goods and services [43].
From the analysis of the PIDA model, it must be concluded that the entrepreneurial intent remains a state of mind that formalizes future ideas through objective behaviors such as the search for information and the real existence of a desire to realize them.

2.2. Entrepreneurial Intent Determinants

Entrepreneurial intent determinants have renewed the interest of theorists and practitioners in recent years. Diverse approaches have looked at the entrepreneurial intent in terms of an emotional, cognitive or behavioral expression of the individual [8, 9, 5, 47, 6, 41, 42, 43] or as a phenomenon arising from the environment surrounding the individual [38, 32, 7, 41]. Indeed, approaches explained entrepreneurial intent following attitudinal and behavioral expressions like the theory of the self-efficacy of Bandura [8,9,10], the theory of the expectation ("VIE: Valence-Instrumentality-Expectation")[47] and the theory of planned behavior [5] are being agreed on the fact that the entrepreneurial intent will be expressed only if the individuals develop objective sensations. These last are indicated by the self-esteem and the capacity to exercise the role of the entrepreneur as well as the expectations and motivations expressed in the relation to the entrepreneurial act. While the approaches explained the entrepreneurial intent by the individual’s environment as the entrepreneurial event training model [38] and the grouped relationship model [6] focus mostly on the inherited culture and an organizational routine. In the same way, these last approaches precise the importance of the university environment on training the future student entrepreneur. The environment explained by this approach, is no longer just made up of parents, but the individual is able to effectively produce all the entrepreneurial knowledge acquired from his neighborhood. Likewise, the digital entrepreneurship environment influenced a lot of students to undertake (for example: idol entrepreneurs who make the buzz on social networks, celebrities from the business world, etc.). The model of Tounés [41,42,43] conducted among students was taken as a reference for the current study because it took as a reference the framework of the social dimensions of entrepreneurship of Shaper and Sokol [38] and the theory of behavioral prediction of Ajzen [4,5] which were known by their scientific robustness.

2.3. Entrepreneurial Competition Projects

Entrepreneurial competition projects can be considered as an indirect method of entrepreneurial pedagogy. The latter can be applied either in the form of a functional and classical method or a transversal and project-based method [41]. Project-based pedagogy offers students the opportunity to be involved in entrepreneurial challenge projects. The challenge means to design a creative and innovative ideas limited by time. To succeed, the student competitor commits himself through his values, his qualities of innovator and his entrepreneurial management skills. The entrepreneurial project manager must provide the necessary effort to meet the requirements of time, cost and quality. Entrepreneurial competition projects are specific and unique and are slightly different from entrepreneurial actions at the technical and organizational level. It should be emphasized that entrepreneurial actions including for stages: awareness-raising; training; coaching; and counseling [3, 13, 30, 44, 45] could encompass several entrepreneurial competition projects. In contrast to entrepreneurial actions that may be more or less long term, entrepreneurial competition projects are characterized by an extremely short life cycle that can be reduced, in some cases, to 48 hours like the project ”Startup Weekend” organized in the city of Agadir (Morocco). That said, the project life cycle of entrepreneurial competition calls for a permanent and continuous adaptation. The latter offers the student entrepreneur the opportunity to win a prize.

3. Methodology

This research focuses on the study of the entrepreneurial intent determinants among students, especially university students participated in entrepreneurial competitions projects. Our first field investigations have revealed the existence of three particular categories of students, namely, students who have not yet completed their studies, graduate students and students who have already lived the entrepreneurial experience. This research work focuses on the three mentioned categories involved in entrepreneurial competitions (Injaz Al-Maghrib project, Startup Weekend project and Souss Women Challenge project) organized in Agadir City. As follows, our sample consists of 120 students. 111 responses have been received, it represents 92, 5% of students who proved a positive feeling towards entrepreneurship. The following table 2 summarizes the methodological and epistemological approach adopted during this research.

| Table 2. Methodology |
|----------------------|
| Epistemological paradigm | Positivist |
| Type of study | Deductive study |
| Nature of the study | Quantitative (questionnaire) |
| Type of sampling | Reasoned choice |
| Location of the investigation | Agadir |
| Statistical Analysis Software | SPSS.25 |
| Type of statistical analysis | - Descriptive Analysis, Principal Component Analysis, Regression Analysis |
Survey

The variables introduced in the questionnaires like, Self-confidence; Social networks influence; Family experience; Motivation; Love of risk; Social status; Patience; University life Influence; Financial success objective; Previous experiences Influence; Sense of challenge; University education; Goal of fulfillment; technical and technological skills; Self-efficacy, were formulated from the literature review and the exploratory interviews. The elaboration of the items was based on the statements belonging to the Tounés model [41], Shapero and Sokol [38] and the Ajzen model [5]. Other variables were identified from the interviews like the patience and social networks influence. The questionnaire consists of 2 essential parts. In the first part, we grouped questions about the respondent’s profile, such as gender, age, family status, university profile, technical training followed, advice on entrepreneurship and the intention to start one’s own business one day. In the second part we were interested in the entrepreneurial intent determinant’s perception. Respondents are asked to answer on a similar scale from 1 to 5 ranging from "Strongly Disagree" to "Strongly Agree". The data are analyzed under Spss25.

4. Analysis and Results

4.1. Demographic Characteristics

The result in the Table 3 shows that the majority of the students studied are women representing 55% and 45% are men. 91% of respondents are young people including the ages of 20 and 25 years old.

They are all, 100%, academics and singles. The surveys include a varied percentage of 37.8% of ordinary students who have not yet completed their education, 57.7% of graduate students and 3.6% of students who have had previous entrepreneurial experience. 62.2% of respondents continued technical training in public or private specialized schools. The following Table 3 summarizes the demographic characteristics of the surveyed.

| Categories                        | Effective | Frequency (%) |
|-----------------------------------|-----------|---------------|
| Gender                            |           |               |
| Man                               | 50        | 45            |
| Woman                             | 61        | 55            |
| Age                               |           |               |
| Less than 20 years                | 8         | 7.2           |
| Between 20-25 years               | 101       | 91            |
| More than 25 ans                  | 2         | 1.8           |
| Family situation                  | Single    | 100           |
| Level of education                | university| 100           |
| Profile                           | Student   | 42            |
|                                    | Diploma   | 64            |
|                                    | Students / Entrepreneur | 4 |
| Technical training on entrepreneurship | Yes | 69        |
|                                    | No        | 42            |

Table 3. Summary of demographic characteristics
4.2. Entrepreneurship Perception

The majority of the respondents indicate a positive feeling towards the entrepreneurial act at 92.8%. Almost all (96.4%), of the respondents expressed the intention to launch their own business someday. Those who do not intend to undertake one day represents a negligible percentage for analysis is 3.6% (Table 4).

| Categories                          | Effective | Frequency (%) |
|-------------------------------------|-----------|---------------|
| I like to undertake                 | Yes       | 103           | 92.8        |
|                                     | No        | 2             | 5.4         |
|                                     | maybe     | 6             | 5.4         |
| Intention to launch own business    | Yes       | 77            | 69.4        |
|                                     | No        | 4             | 3.6         |
|                                     | maybe     | 30            | 27          |

4.3. Homogeneity of Measurement Scales

To test the degree of internal consistency of the respondents’ responses concerning the proposed measurement scale, we will measure the reliability coefficient, also called Cronbach's alpha. It’s between 0 and 1; plus cronbach’s alpha is close to 1 plus it expresses a strong coherence. The cronbach's alpha measure of this study is 0.788, the internal consistency of the measurement scale is considered good.

4.4. Categorization and Ranking of Entrepreneurial Intent Determinants

4.4.1. Ranking the Determinants of Entrepreneurial Intent

The arithmetic mean of 15 variables identified was calculated. The (t) test was conducted according to a level of significance equal to 5% whose value is equal to zero. This test is important to evaluate the threshold of significance for all the variables. If the variables have the same score, the standard deviation can be an element of comparison. Test significance thresholds (t) below 5% (Table 5) indicate that the statistics obtained are significant.

The calculated averages reading confirm a decreasing order of the top five entrepreneurial intent determinants. It’s all about Self-confidence (Score = 4.4815), Self-Efficacy (Score = 4.3524), Motivation (Score = 4.32243), Technical and Technological Skills (Score = 4.2844), Goal of fulfillment (Score = 4.2617). The other determinants show a slightly lower degree of consensus compared to the top five of cited determinant.

| Table 4. Perception of entrepreneurship by respondents |
|--------------------------------------------------------|
| Categories                          | Effective | Frequency (%) |
|-------------------------------------|-----------|---------------|
| I like to undertake                 | Yes       | 103           | 92.8        |
|                                     | No        | 2             | 5.4         |
|                                     | maybe     | 6             | 5.4         |
| Intention to launch own business    | Yes       | 77            | 69.4        |
|                                     | No        | 4             | 3.6         |
|                                     | maybe     | 30            | 27          |

| Table 5. Ranking of entrepreneurial intent determinants |
|--------------------------------------------------------|
| Entrepreneurial Intent Determinants | Average | Standard deviation | Sig. (2-tailed) | Order |
|-------------------------------------|---------|---------------------|-----------------|-------|
| Self-confidence                     | 4.4815  | 1.04552             | 0               | 1     |
| Social networks Influence           | 4.1296  | .85481              | 0               | 11    |
| Family experience                   | 4.0450  | .91837              | 0               | 15    |
| Motivation                          | 4.3243  | 1.16901             | 0               | 3     |
| Risk Love                           | 4.1215  | 1.10497             | 0               | 12    |
| Social status                       | 4.1111  | 1.06194             | 0               | 13    |
| Patience                            | 4.1574  | 1.08655             | 0               | 9     |
| University life influence           | 4.0901  | 1.04054             | 0               | 14    |
| Financial success objective         | 4.1852  | 1.09500             | 0               | 8     |
| Previous experiences Influence      | 4.1441  | .87227              | 0               | 10    |
| Sense of challenge                  | 4.2432  | 1.09724             | 0               | 6     |
| University education                | 4.1909  | 1.10458             | 0               | 7     |
| Goal of fulfillment                 | 4.2617  | 1.06697             | 0               | 5     |
| Technical and technological skills  | 4.2844  | 1.01918             | 0               | 4     |
| Self-efficacy                       | 4.3524  | 1.03757             | 0               | 2     |

Notes: sig. = significance obtained from the t-test

| Table 6. Extraction of the main components |
|-------------------------------------------|
| Component | Total | % of the variance | % cumulated |
|-----------|-------|-------------------|-------------|
| 1         | 5.327 | 35.514            | 35.514      |
| 2         | 2.517 | 16.781            | 52.294      |
| 3         | 1.366 | 9.104             | 61.399      |
| 4         | 1.024 | 6.826             | 68.225      |
| 5         | .858  | 5.723             | 73.948      |
| 6         | .768  | 5.118             | 79.066      |
| 7         | .586  | 3.909             | 82.974      |
| 8         | .490  | 3.269             | 86.244      |
| 9         | .442  | 2.944             | 89.188      |
| 10        | .373  | 2.490             | 91.678      |
| 11        | .365  | 2.433             | 94.111      |
| 12        | .324  | 2.159             | 96.270      |
| 13        | .254  | 1.694             | 97.964      |
| 14        | .205  | 1.370             | 99.333      |
| 15        | .100  | .667              | 100.000     |
4.4.2. Categorization of Entrepreneurial Intent Determinants

Principal Component Analysis (PCA)

Principal component analysis reduces the number of variables by eliminating the least significant variables and constitutes the main dimensions that define the common-sense determinants. The principal components analysis must satisfy the suitability tests (Kaiser-Meyer-Olkin test (KMO)) and Bartlett sphericity test to ensure that the data are valid (factorable) in order to apply a PCA [15]. The benchmark suggested by Kaiser is good when its approaches “1”. The result in Table 6 makes it possible to deduce the feasibility of the PCA method for the present research work. The criteria indicated by the authors are largely respected. Indeed, the value of Kaiser-Meyer-Olkin is equal to 0.763 considered good. Bartlett’s sphericity test is 746,285 with a significance level of 0.000 indicating that the correlation matrix is not an identity matrix.

The Factor Extraction Method

The extraction of the principal components requires the verification of three important criteria: The eigenvalue; the Kaizer-Guttman rule defines a value greater than 1; The percentage of the variance; The accumulation of the variance or the criterion of Cattell’s “Scree test” (1996) with a value of 60%.

The analysis of the data in Table 7 produces the result of 4 main components whose eigenvalue is greater than 1 thus representing 68.225% of the total variance dispersed as follows:

- Component 1 represents 35.514% of the total variance and communicates 5.327 of the inertia.
- Component 2 represents 16.781% of the total variance and communicates 2.517 of the inertia.
- Component 3 represents 9.104% of the total variance and communicates 1.366 of the inertia.
- Component 4 represents 6.826% of the total variance and communicates 1.024 of the inertia.

As indicated by the Cattel criterion [16] by analyzing the accumulation of the variances on the eigenvalue graph, it would be necessary to stop where the change of the slope manifests itself.

Figure 1 shows the change of the slope at the 4th component.

![Figure 1. Graph of eigenvalues](image-url)
Table 7. Factor analysis of entrepreneurial intent determinants

| Principal components (the determinants) | 1 | 2 | 3 | 4 |
|-----------------------------------------|---|---|---|---|
| 1. Attitudes and behaviors Factors     |   |   |   |   |
| (α=0.853; var=35.514%)                 |   |   |   |   |
| Self-efficacy                          | .909 |
| Sense of challenge                     | .858 |
| Motivation                             | .752 |
| Risk Love                              | .620 |
| Objective of Financial Success         | .614 |
| 2. Technical and Professional skills   |   |   |   |   |
| (α=0.851; var=16.781%)                 |   |   |   |   |
| Technical and Technological Skills     | .811 |
| Goal of fulfillment                    | .806 |
| University education                   | .728 |
| Patience                               | .712 |
| Social status                          | .507 | .570 |
| 3. Social and family influence         |   |   |   |   |
| (α=0.716; var=15.93%)                  |   |   |   |   |
| Influence of social networks           | .804 |
| Self-confidence                        | .789 |
| Influence of University Life           | .603 |
| Family experience                      | .810 |
| Influence of previous experiences      | .807 |

Extraction method: Principal component analysis.
Rotation method: Varimax with Kaiser normalization.
a. Convergence of the rotation in 6 iterations.

The analysis of the partial correlations between the numerous variables and the principal components (factorial axes), was carried out using the matrix of the components without rotation. But, for a more adequate interpretation of the four main components of the present study, a Varimax rotation that consists of providing a simple and reduced structure with new easy-to-interpret indicators has been applied (Table 7).

Component 1 expressing 35.514% of the total variance is strongly and positively correlated with the variables: "Self-efficacy", the correlation indicator is equal to (0.909); "Sense of Challenge", (0.858); "Motivation", (0.752); "Risk Love", (0.620); "Financial Success Objective ", (0.614). Component 2 expressing 16.781% of the total variance is strongly and positively correlated with: "Technical and technological skills", (0.811); "Goal of fulfillment ", (0.806); "University Education", (0.728); "Patience", (0.712). Component 3 expressing 9.104% of the total variance is strongly and positively correlated with: "social networks Influence", (0.804); "Self-confidence", (0.789); "Influence of University Life", (0.603). Component 4 expressing 6.826% of the total variance is strongly and positively correlated with: "Family experience", (0.810); "Influence of previous experiences", (0.807). All of the resulting three components of entrepreneurial intent determinants achieve a Cronbach’s alpha >0.7.

5. Multivariate Analysis: Significant Links between Variables

To begin, we have performed Linear regression analysis on the three components of entrepreneurial intent determinants (Latent variable1: Attitudes and behaviors; Latent variable2: Technical and Professional skills; Latent variable3 and 4: Social and family influence).

5.1. Multicollinearity of Independent Variables

Linear regression allows us to confirm or refute the assumptions made in previous sections. It studies the statistical relationship between the dependent variable and
several independent components of variables.

Linear regression analyzes is interpreted using several criteria. In the following Table 8, the criterion VIF (Variance Inflation Factors) and the criterion of Tolerance were calculated. The results (Table 8) showed the Tolerance values and those of VIF were well within the recommended limits (VIF <2 and Tolerance > 0.2). Indeed, the VIF and Tolerance tests indicated that the correlation between the variables is acceptable.

Figure 2. Categories of entrepreneurial intent determinants among students benefiting from entrepreneurial competition projects.
5.2. Hypotheses Testing

On the basis of the results obtained using the literature review, we have proposed two hypotheses:

Hypothesis 1, the determinants of entrepreneurial intention are identified by behavioral, technical, social and family order of variables (H 1). Also, the identified determinants do not all have the similar degree of importance (H2). This last hypothesis will be verified by descriptive statistics (mean and rank order) presented in previous section. The first hypothesis (H1) will be verified by a regression model. Two models have been developed. The first one is related to the personnel characteristics of students and their effect on entrepreneurial intent. The second one is more developed with latent variables which are indicated by three components of factors (latent variables): Latent variable 1: Attitudes and behaviors determinants; Latent variable 2: Technical and Professional skills determinants; Latent variable 3 and 4: Social and family influence determinants.

The following table 9 allows us to observe the specific effect of each component model on the entrepreneurial intent which was indicated in this study by the positive perception of entrepreneurship and the intention to undertake.

Based on the results presented in Table 9 above, it seems interesting to judge the second model as the most relevant in explaining the variance of the entrepreneurial intent of the students surveyed. Compared with the first model explaining 23.5% of the total variance, the second model alone accounts for 42.4% of the variance of the entrepreneurial intent.

The following Table 10 summarizes the results of the variance analysis related to each model. The sum of the squares, the degree of freedom, and the average of the squares are indicated by the present analysis. Indeed, among the two models obtained, the second model displays the most important regression as regards the sum of squares R = 15.160. Similarly, the latter model has the least significant residue compared with previous models R = 20.585.

| Table 8. Collinearity, Tolerance and VIF Values |
|------------------------------------------------|
| Collinearity statistics                      |
| Models                                      |
| Tolerance                                  |
| VIF                                         |
| 1                                           |
| Gender                                     |
| .629                                       |
| 1.590                                      |
| age                                        |
| .623                                       |
| 1.606                                      |
| profile                                    |
| .700                                       |
| 1.428                                      |
| Marital status                             |
| .589                                       |
| 1.697                                      |
| Entrepreneurship training                  |
| .666                                       |
| 1.501                                      |
| 2                                           |
| Intention to launch own business            |
| .750                                       |
| 1.333                                      |
| Latent variable 1                          |
| .740                                       |
| 1.351                                      |
| Latent variable 2                          |
| .868                                       |
| 1.153                                      |
| Latent variable 3                          |
| .753                                       |
| 1.327                                      |
| Latent variable 4                          |
| .631                                       |
| 1.586                                      |
| a. Dependent variable: Entrepreneurial intent |
| b. Models predictors 1: (Constante), Intention to launch own business, profile, Entrepreneurship training, Gender, age, Marital status |
| c. Models predictors 2: (Constante), Intention to launch own business, profile, Entrepreneurship training, Gender, age, Marital status, Latent variable 1: Attitudes and behaviors, Latent variable 2: Technical and Professional skills, Latent variable 3 and 4: Social and family influence |

| Table 9. Regression examining the determinant of entrepreneurial intent |
|------------------------------------------------------------------------|
| Summary of models                                                      |
| Change Statistics                                                      |
| Durbin-Watson                                                          |
| Model | R    | R²  | ∆R² | ∆F  | R² | F   | df1 | df2 | Sig. F | R² | F   | df1 | df2 | Sig. F | R² | F   | df1 | df2 | Sig. F |
|-------|------|-----|-----|-----|----|-----|-----|-----|--------|----|-----|-----|-----|--------|----|-----|-----|-----|--------|
| 1     | .485a| .235| .140| .75465|    | .235| 2.461| 6   | 48    | .037|    |     |     |        |
| 2     | .651b| .424| .293| .68400|    | .189| 3.607| 4   | 44    | .013|    |     |     |        | 2.507|     |     |     |        |
| a. Predictors: (Constant), Gender, age, profile, Marital status, Entrepreneurship training, Intention to launch own business |
| b. Predictors: (Constant), Gender, age, profile, Marital status, Entrepreneurship training, Intention to launch own business; Latent variable 1: Attitudes and behaviors, Latent variable 2: Technical and Professional skills, Latent variable 3 and 4: Social and family influence |
| c. Dependent variable: Entrepreneurial intent |
The multidimensional descriptive analysis carried out during this research work reveals significant results. Indeed, the category of determinants relating to "attitudes and behaviors" of students communicates the maximum of information and explains 35.514% of the total variance (Figure 2). This category includes factors: "Self-efficacy", "Sense of challenge", "Motivation"; "Love of Risk" and "Financial success goal". The variables cited are theoretically supported by diverse studies [32, 8, 9]. Among the variables cited by these authors are the sense of challenge and financial success goal. Likewise, the motivation variable is considered a source of entrepreneurial intent [47]. The author suggested a positive and meaningful relationship between motivation and entrepreneurial intent, and he proposed that the variable "motivation" helps to understand the entrepreneurial process [47]. The variable “Love of risk” is indicated as an entrepreneurial intent determinant [43].

The multidimensional analysis also reveals another category of determinants "technical and professional skills" expressing less importance than the attitudes and behaviors category but contributes significantly to explain entrepreneurial intent. The Component 2 expresses 16.781% of the total variance and means the university contribution of entrepreneurship training. These results are supported by the work of Authors [43]. The third category of determinants identified by the PCA is "Social and family influence". This last dimension accounted for 15.966% of the total variance and signified the role of the family and social environment in stimulating the entrepreneurial intent of the students. The variables that are related to this dimension are; "Self-confidence"; "university life Influence"; "Family experience"; "Influence of previous experiences". Social and family dimension impact student entrepreneurial intent [6]. The results of the present research show that the variables "Social networks influence" and "patience" are specific to the present empirical research work. In fact, following the results of exploratory semi-structured interviews conducted with students, we "identified the social networks influence" this last variable had a positive impact on the student’s entrepreneurial intent involved in competition projects. This is a particular attention focused by students to the virtual world in relationship with the entrepreneurship. It means that students pay a lot of attention to digital entrepreneurial information. The analysis of the PCA results shows a variable "Social Status", with modest correlation with two dimensions at the same time: "attitudes and behaviors" and "technical and professional skills". Therefore, the elimination of the variable from the analysis model has proved necessary. Finally, it must be said that the majority of entrepreneurial intent determinant are categorized “Soft Skills” compared with the Hard Skills category, which is equally consistent with the results of our previous research [1, 2].

The results of the regression analysis show that the significant determinants of entrepreneurial intent are attitudes and behaviors combining with factors related to technical and professional skills, Social and family influence and also personal characteristics. This suggests that for developing the entrepreneurial intent, Soft skills of students are the most relevant factors. Given the very particular context of entrepreneurial competition project, the students participating in this experience develop more attitude and behavior necessary to have a positive perception of entrepreneurial project, therefore have intention to lunch their own business.

### 7. Conclusion and Future Researches

This paper presents the result of empirical studies about entrepreneurial intent of students involved in entrepreneurial competition projects. The objective was the identification of entrepreneurial intent determinants. We assumed that the determinants of entrepreneurial intent are
identified by behavioral, technical, social and family order (H1). Also, the identified determinants do not all have the similar degree of importance (H2). Following the results obtained with PCA (Principal Components Analysis) and regression analysis, it is important to point out that the entrepreneurial intent among students involved in entrepreneurial projects and especially in entrepreneurial competitions is influenced, firstly, by factors related to the attitudes and behaviors of students, secondly by technical and technological factors and thirdly by factors related to the family and social environment (H1). The descriptive analysis by using means and standard deviation, of the fifteen variables obtained on the basis of the literature review and the exploratory interviews, shows a high degree of consensus for all the variables. Only the degree of importance given by respondents differs from one variable to another. Thus, the first five identified determinants are: Self Confidence (Score = 4.4815), Self efficiency (Score = 4.3524), Motivation (Score = 4.3243), Technical and professional skills (Score = 4.2844), Goal of fulfillment (Score = 4.2617). This confirms that the determinants related to attitudes and behaviors are a necessary but not sufficient condition for the emergence of entrepreneurial intent and are not representing the same degree of importance (H2), it must be complemented by the technical and the social dimension. The results of the present empirical study reveal the existence of two important and specific variables of this research context (entrepreneurial competition project in Agadir city), it is the influence of the “social networks” and the “patience” acquired following several experiences in projects of entrepreneurial competitions.

As a first practical implication of the present study, the result could be used by the competent institutions to lunch the different strategy, policies, programs to encourage entrepreneurial project in the city of Agadir.

As a second implication, this paper highlights the all-important role of entrepreneurial competition project in entrepreneurial intent development. In fact, the student who lived such experiences of competitions learns more and develop entrepreneurial intent. The current research could contribute to the development of entrepreneurship in the city of Agadir (Morocco) by identifying categories of entrepreneurial intent determinants. This study was limited to students who benefited from entrepreneurial competition projects such as (INJAZ AL-MAGHRIB project, STARTUP WEEKEND project and SOUSS WOMEN CHALLENGE project). It would be interesting to target in future empirical studies other categories of students to do a comparative analysis. The current empirical study was limited to the city of Agadir, and it would be also attractive to target other cities of Morocco. Finally, the empirical results obtained in the present research are specific to the study context (the city of Agadir and student involved in an entrepreneurial competition project), so it would be impossible to generalize them to other categories of students in the other contexts.

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