



RESEARCH ARTICLE

OPEN ACCESS

ENTREPRENEURSHIP IN THE PHARMACEUTICAL SECTOR: A STUDY ABOUT THE ENTREPRENEUR PROFILE AMONG UNIVERSITY STUDENTS IN A PRIVATE HEI

¹João Marcos Ruas Ferreira dos Santos, ²Daniela Pereira de Almeida Ruas, ⁶Rosimara de Jesus Andrade Caitite, ⁸Adriana Vanderlei do Amorim, ⁷Diêgo Andrade de Oliveira, ⁷Rafael Cerqueira Campos Luna, ⁷Michela Macedo Lima Costa, ⁸Iaggo Raphael David, ^{*3,4,5,9}Stênio Fernando Pimentel Duarte and ¹⁰Márcio Céio dos Santos

¹Graduating in Pharmacy from the Independent Faculty of the Northeast- FAINOR and Bachelor of Business Administration from the University Center Faculty of Technologies and Sciences – UniFTC; ²Master in Neurolinguistics from the State University of Southwest Bahia - UESB and Graduating in Pharmacy from the Independent Faculty do Nordeste – FAINOR; ³Lecturer Independent Faculty of the Northeast – FAINOR; ⁴Lecturer University Center Faculty of Technologies and Sciences – UniFTC; ⁵Lecturer Faculty of Saint Augustine – FASA; ⁶Biochemical Pharmaceutical Specialist in Public Health (IBPEX), specialist in Clinical and Toxicological Analysis (FAINOR)) and Hematology Specialist (Cândido Mendes University); ⁷Doctor and Professor of Medicine, Santos Agostinho School of Health – FASA; ⁸Specialist and Researcher – NEPEdc; ⁹Esaú Matos Municipal Hospital - Bahia, Brazil; ¹⁰Graduated in Business Administration from the State University of Southwest Bahia - UESB, Specialist in Methodology and Management of Higher Education from the Independent Faculty of the Northeast - FAINOR and Master in Business Administration from the Municipal University of São Caetano do Sul - USCS

ARTICLE INFO

Article History:

Received 03rd August, 2019
Received in revised form
21st September, 2019
Accepted 11th October, 2019
Published online 30th November, 2019

Key Words:

Entrepreneurship, Students. Drugstore.

*Corresponding author:

Stenio Fernando Pimentel Duarte

ABSTRACT

This paper aims to characterize the entrepreneurial profile of students from the first to the tenth semester of the pharmacy course of a private HEI, in Vitória da Conquista. To this end, it sought to identify if the student has entrepreneurial behavioral characteristics (CCE's) that favor the entrepreneurial profile. The results show that students have the ten CCE's, and the opportunity-seeking feature obtained the highest score among students, but the other characteristics need to be improved during the pharmacy course. This is a descriptive cross-sectional research based on a quantitative approach.

Copyright © 2019, João Marcos Ruas Ferreira dos Santos et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: João Marcos Ruas Ferreira dos Santos, Daniela Pereira de Almeida Ruas, Rosimara de Jesus Andrade Caitite et al., 2019. "Entrepreneurship in the pharmaceutical sector: a study about the entrepreneur profile among university students in a private hei", *International Journal of Development Research*, 09, (11), 32049-32052.

INTRODUCTION

The development of a country is based on entrepreneurship actions. Thus, the employment and income generation opportunities that arise with the opening of new companies characterize entrepreneurship as a socioeconomic phenomenon, in the fight against unemployment and economic growth (Toktamysov et al., 2019). Micro and small businesses are

born from people who have entrepreneurial characteristics and behavior. And within the perspective that entrepreneurship refers to the economic development of the country, one of the sectors that has been growing is the pharmaceutical sector, which significantly drives Brazil's economy (Câmara; Andalécio, 2012). According to Pepin and ST-Jean (2019), based on the understanding that Higher Education Institutions (HEIs) play a fundamental role in the construction of knowledge for the development of entrepreneurial culture, the

need arises that academic education should be geared towards Encourage students greater autonomy, creativity and ability to lead, based on an entrepreneurial vision, through teaching programs, combining theory and practice to consolidate knowledge. The word entrepreneurship comes from the French word "entrepreneur" and means to accomplish, and the characteristics related to the entrepreneur are innovation, leadership, creativity, initiative, among others (Block *et al*, 2017). In this sense, entrepreneurship refers to the ability of the individual to present innovations based on results to be achieved. It takes attitude, an entrepreneurial attitude to develop ideas and put them into practice. Thus, the entrepreneurial entrepreneur starts from his own business to generate financial opportunities with responsibility and knowledge (Morales *et al*, 2016). Studies on entrepreneurial behavior were developed from psychologist David McClelland in 1972, with an emphasis on the creative ability and new business insight of people with the ability to take risks and new responsibilities through knowledge transformation. According to these studies, ten behavioral attitudes that characterize the entrepreneur were described, and are common to some people (Marion-Santos, 2013).

David McClelland constructed a way to identify and analyze entrepreneurial characteristics and their behavior through an evaluation method containing fifty-five statements for self-analysis by the individual, an instrument also used by EMPRETEC - SEBRAE, to evaluate the entrepreneurial profile of entrepreneurs (Ribeiro; Moreira, 2017). The ten Entrepreneurial Behavioral Characteristics (CCE's) proposed by Maclland describe the main behaviors of individuals with the entrepreneurial profile, being divided into three sets, according to the theory of need for achievement, planning and power, proposed by the psychologist, as individuals develop from one of these levels of need (Krüger; Minello, 2019). In this sense, the research has as its problem: How is the entrepreneurial profile of the student of the pharmacy course of a private HEI, regarding the formation of enterprising pharmacists? The question raised refers to the hypothesis that the student of pharmacy has difficulties in developing his entrepreneurial potential during his academic formation. Thus, it is believed that a knowledge base on entrepreneurship would give the egress student greater security as a pharmaceutical professional. From this, another hypothesis to be considered is that the student of the pharmacy course presents a potential entrepreneur built during his academic formation. From these considerations, we can observe the validity of this study, since understanding the entrepreneurial profile of the pharmacy student allows us to know how their academic education takes place and contribute to the curricular improvement of the pharmacy grid, bringing the reflection on the role of a Higher Education Institution for the development of student entrepreneurship as future professionals in the pharmaceutical field, considering the importance of the entrepreneur for the economy and society, besides adding to the scientific knowledge. Thus, the overall objective of this studyIt is to characterize the entrepreneurial profile of students from the first to the tenth semester of the pharmacy course of a private HEI, in Vitória da Conquista.

METHODOLOGY

This study is characterized as a descriptive research to identify the entrepreneurial profile of students from the private

pharmacy course, specifically students from the first to the tenth semester. This is a cross-sectional research with a quantitative approach. The research was conducted in a Private Higher Education Institution, in the city of Vitória da Conquista, with the following geographic coordinates: Latitude: 14 ° 51 '53' 'South, Longitude: 40 ° 50' 13 " West. The city is recognized as an educational center and has a significant number of university students, according to the IBGE (Brazilian Institute of Geography and Statistics), belonging to both public and private schools. Data were collected at a two-month interval, using as an instrument of data collection an objective form, containing fifty-five questions, in which each statement has five possibilities of answers on the Likert scale: never (1), rarely (2), sometimes (3), usually (4) and always (5), based on McClelland's entrepreneurial characteristics test (Minello *et al.*, 2017), already validated in other studies. The forms were personally delivered to classrooms and students were invited to participate in the survey. 114 forms were completed by students from first to tenth semester. Data were tabulated and coded, and for analysis statistical tests were performed using the software "Statistical Package for the Social Sciences" - SPSS®, version 22, from which the minimum, mean and standard deviation values of each SCC were obtained.

RESULTS AND DISCUSSION

The studied population concerns students from the first to the tenth semester of the pharmacy course of a private Higher Education Institution, a total of 114 students, whose data were obtained through a form with objective questions, which allowed to reach the results presented in the tables and graph below. According to the table above, it is possible to verify in the profile of students from the first to the tenth semester of the pharmacy course of a private HEI a female prevalence (70%). Another aspect to note is that 65% of the total samples have family business, results obtained through a nonparametric comparison of the Mann-Whitney test, but only 26% intend to undertake their own business. Considering the total of the research participants, 40% have a family income of two to three minimum wages, and 51% intend to take a public exam after graduation in pharmacy, results obtained through a non-parametric analysis using the Kruskal test. -Wallis of independent samples. Regarding McClelland form analysis, each alternative can be scored a maximum of twenty-five points. If the result is equal to or greater than fifteen and less than or equal to twenty-five, the individual is characterized as an entrepreneur. Table 2 shows the description of the minimum and maximum values of the entrepreneurial behavioral characteristics of the sample studied during the research, comparing the most and least evident characteristics in the entrepreneurial profile of the students. When analyzing the set of needs, there is a higher score in the characteristics that make up the need for fulfillment, as seen in BOI, COM and EQE. In the characteristics that make up the need for power, as seen in PCR and AI, a low score is noted. Thus, it is observed that students develop well the characteristics search for new opportunities, commitment, demand for quality and efficiency of results, and take calculated risks. On the other hand, the power of persuasion, independence and self-confidence are not evident, which need to be developed, as entrepreneurial characteristics are fundamental in the formation of an entrepreneur. These characteristics are directly related to the development of skills and competencies, which vary from person to person, but which can be improved

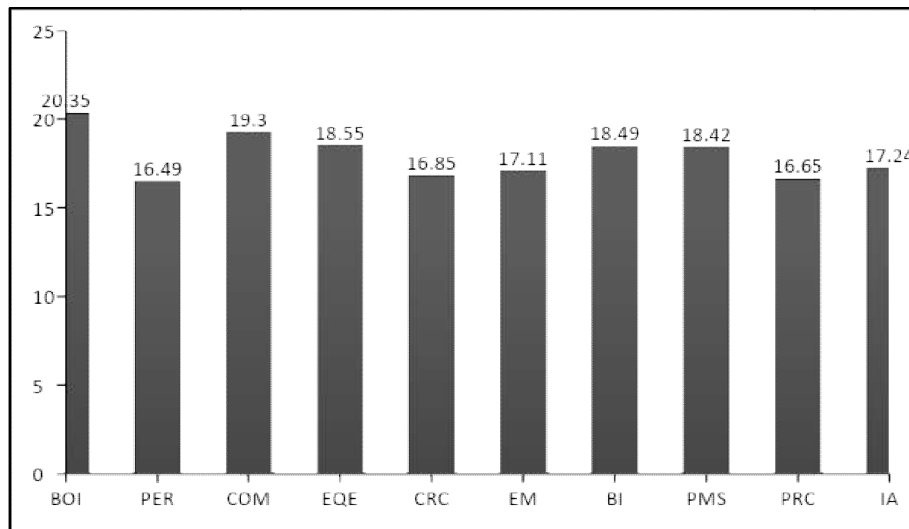
Table 1. Categories and Variables related to the entrepreneur profile

| Category | Variable | Frequency | | Category | Variable | Frequency | |
|---------------|------------------------------|-----------|----|----------------------------|-----------------------------|-----------|----|
| | | Absolute | % | | | Absolute | % |
| Genre | Male | 34 | 30 | Family Business | YES | 74 | 65 |
| | Feminine | 80 | 70 | | NOT | 40 | 35 |
| Category | Variable | Frequency | | Category | Variable | Frequency | |
| | | Absolute | % | | | Absolute | % |
| Family income | One minimum wage | 12 | 10 | Perspectives after college | Contest | 58 | 51 |
| | One to two minimum wages | 34 | 30 | | Undertake | 26 | 23 |
| | Two to three minimum wages | 45 | 40 | | Work in the private company | 27 | 24 |
| | More than four minimum wages | 23 | 20 | | Other | 3 | 2 |

Source: Adapted from Minello *et al* (2017)**Table 2. Relationship between minimum, maximum and mean values of EBC's**

| Needs set | Entrepreneurial Features | Initials | Minimum | Maximum | Average | Standard deviation |
|-------------|------------------------------------|----------|---------|---------|---------|--------------------|
| Achievement | Opportunity Search | BOI | 12.00 | 25.00 | 20.35 | 2.46742 |
| | Persistence | PER | 11.00 | 23.00 | 16.49 | 2.05347 |
| | Commitment | COM | 14.00 | 25.00 | 19.30 | 2.44271 |
| | Quality and efficiency requirement | EQE | 12.00 | 25.00 | 18.55 | 2.32376 |
| | Take calculated risks | CRC | 10.00 | 24.00 | 16.85 | 2.50972 |
| Planning | Setting goals | EM | 11.00 | 22.00 | 17.11 | 2.23709 |
| | Search for information | BI | 11.00 | 24.00 | 18.49 | 2.61461 |
| | Systematic planning and monitoring | PMS | 12.00 | 24.00 | 18.42 | 2.59985 |
| Power | Persuasion and contact networks | PCR | 10.00 | 24.00 | 16.65 | 2.34551 |
| | ence and self confidence | IA | 10.00 | 24.00 | 17.24 | 2.45512 |

Source: own research (2019)



Source: own research (2019)

Graphic 1. Average obtained from EBC's

through the entrepreneurship disciplines offered in the curriculum of an HEI pharmacy course. Thus, HEIs should be seen as disseminating bodies of the concept that entrepreneurship should be founded as the basis of academic knowledge, since teaching promotes the development of management skills through entrepreneurial learning (LEIVA *et al*, 2014). According to the average values of each CCE, the opportunity search feature (BOI) scored higher, and according to McClelland, this feature demonstrates an entrepreneur's skills in how to perform the tasks, meet new challenges and opportunities. The results presented in the graph indicate that students have the ten entrepreneurial behavioral characteristics, since the averages are in the range of fifteen to twenty-five, however, the characteristics PER (16.49), CRC (16.85), MS (17.11) and PRC (16.65) obtained averages close to the minimum limit defined by McClelland, and need to be better developed and improved during graduation. In this case, in relation to academic teaching, as Minello *et al* (2017) points out, "For the development of entrepreneurial characteristics to

become continuous and habitual, universities need to be committed and engaged" (MINELLO *et al*, 2017, p. 74). Garcia (2012) points out that one of the limitations for the expansion of entrepreneurship by students is the lack of alignment of theory and practice during academic education. Despite this statement, the author makes a comparison between academic and nonacademic entrepreneurs saying that academically-based entrepreneurs excel in business, with a greater ability to succeed successfully than professionals who do not have a knowledge base grounded on a HEI, as the student applies the knowledge acquired in the classroom when setting up a business of his own. With regard to the National Curriculum Guidelines for the undergraduate pharmacy course, the Ministry of Education, through Resolution No. 06 October 2017, says that pharmacist training should be directed towards humanistic, critical, reflective and generalist, and among the points to be considered is leadership, entrepreneurship, commitment, action management, which guide students in the acquisition of skills, abilities and

attitudes for the development of an entrepreneurial professional (Brazil, 2017). In this sense, according to Sarturi *et al* (2013), the teaching of entrepreneurship in the pharmacy course contributes to the training of managers, with greater ability to manage their own businesses, awakening to opportunities and excelling in a very competitive field. It is the entrepreneur's responsibility to seek knowledge in various areas to improve their business strategies.

Final Considerations

According to the results obtained during the research, the students present the entrepreneurial characteristics in the set of needs more related to the accomplishment, since students that seek accomplishment behave in order to reach their objectives. The averages of the other characteristics that make up the planning and power needs sets indicate that students have entrepreneurial characteristics, but need to be improved during graduation through subjects offered by HEI with emphasis on teaching about entrepreneurship, as directed by the curriculum guidelines for the undergraduate degree in pharmacy. The current economic scenario in the country requires the action of innovative people who have an entrepreneurial profile capable of developing dynamic ideas that make a difference in a competitive business environment. From the entrepreneurial spirit, it will be possible to identify the opportunities and put the entrepreneurial ideas into practice in the most appropriate way, for this the HEIs have the role of developing or improving in pharmacy students skills that characterize this profile.

REFERENCES

- Block, J. H. *et al*. The Schumpeterian entrepreneur: A review of the empirical evidence on the antecedents, behaviour and consequences of innovative entrepreneurship. *Industry and Innovation*, v. 24, n. 1, 2017. Disponível em: <https://www.tandfonline.com/doi/full/10.1080/13662716.2016.1216397> Acessado em 10 de abril de 2019.
- Brasil. Ministério da Educação. Resolução nº 6, de 19 de outubro de 2017. Disponível em: http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=74371-rces006-17-pdf&category_slug=outubro-2017-pdf&Itemid=30192 Acessado em 24 de abril de 2019.
- Câmara, E. C.; Andalécio, A. ML. Características empreendedoras: um estudo de caso com farmacêuticos utilizando o modelo de McClelland. *REGEPE-Revista de Empreendedorismo e Gestão de Pequenas Empresas*, v. 1, n. 3, 2012. Disponível em <http://www.regepe.org.br/regepe/article/view/32> Acessado em 07 de abril de 2019.
- Garcia, R. *et al*. Empreendedorismo acadêmico no brasil: uma avaliação da propensão à criação de empresas por estudantes universitários. *REGEPE-Revista de Empreendedorismo e Gestão de Pequenas Empresas*, v. 1, n. 3, 2012. Disponível em: <http://www.regepe.org.br/regepe/article/view/39> Acessado em 13 de abril de 2019.
- Ibge. Disponível em: <https://www.ibge.gov.br/cidades-e-estados/ba/vitoria-da-conquista.html> Acessado em 11 de abril de 2019.
- Krüger, C.; Minello, I. F. Structural model of employee behavior measurement. *Revista de Negócios*, 24(1), 2019. Disponível em: <https://bu.furb.br/ojs/index.php/rn/article/view/7814/4253> Acessado em 10 de abril de 2019.
- Leiva, J. C. *et al*. The influence of Entrepreneurial learning in new Firms' performance: a study in costa rica. *Innovar*, v. 24, n. SPE, 2014. Disponível em: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-50512014000500011 Acessado em 24 de abril de 2019.
- Minello, I. F. *et al*. Características comportamentais empreendedoras: um estudo com acadêmicos de administração de uma universidade brasileira. *Revista de Administração da Universidade Federal de Santa Maria*, v. 10, 2017. Disponível em: <https://www.redalyc.org/html/2734/273452299006/Acessado> em 13 de abril de 2019.
- Morales, T. *et al*. The Entrepreneurship of the Young Population in the Ecuadorian Context, Showing from the Approach of the Science, Technology and Society. *Journal of Service Science and Management*, v. 9, n. 01, 2016. Disponível em: https://file.scirp.org/pdf/JSSM_2016021510350047.pdf Acessado em 07 de abril de 2019.
- Ortega, L. M. Programa Empreendedorismo-Escola: influenciando a Universidade por meio do tripé ensino, pesquisa e extensão. *Revista de Administração, Contabilidade e Economia da Fundace*, v. 7, n. 1, 2016. Disponível em: <https://www.fundace.org.br/revistaracef/index.php/racef/article/view/189> Acessado em 12 de abril de 2019.
- Pepin, M; ST-JEAN, E. Assessing the impacts of school entrepreneurial initiatives: A quasi-experiment at the elementary school level. *Journal of Small Business and Enterprise Development*, v. 26, n. 2, 2019. Disponível em: <https://www.emerald.com/insight/content/doi/10.1108/JSBED-07-2018-0224/full/html> Acessado em 10 de agosto de 2019.
- Ribeiro, M. F. S; Moreira, R. N. Características do comportamento empreendedor dos professores de empreendedorismo de ensino fundamental de uma solução educacional. *Revista de Administração da UNI7, Fortaleza*, v.1, n. 1, 2017. Disponível em: <http://www.uni7.edu.br/periodicos/index.php/revistadaadministracao/article/view/493> Acessado em 06 de abril de 2019.
- Sarturi, P. M. *et al*. Empreendedorismo em farmácias e drogarias: o perfil dos profissionais da cidade de guarapuava-PR. In: *Anais do Convibra - Congresso Virtual Brasileiro De Administração*, São Paulo, 2013. Disponível em http://convibra.org/upload/paper/2013/32/2013_32_8112.pdf Acessado em 6 de abril de 2019.
- Toktamysov, S.Z. *et al*. Implementing the Education of Future Entrepreneurs in Developing Countries: Agile Integration of Traditions and Innovations. *Journal of Entrepreneurship Education*, v. 22, n. 5, 2019. Disponível em: <https://www.abacademies.org/articles/implementing-the-education-of-future-entrepreneurs-in-developing-countries-agile-integration-of-traditions-and-innovations-8569.html> Acessado em 29 de agosto de 2019.