Entrepreneurial intention, intention to take civil services examination and the effects of entrepreneurship education: differences among undergraduate students

Intenção empreendedora, intenção de realizar concurso público e os efeitos da educação empreendedora: diferenças entre estudantes de graduação

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ABSTRACT

The aim of this article is to compare the levels of entrepreneurial intention (EI) and intention to take Civil Services Examinations (ICSE) among university students from several areas of knowledge and to evaluate the effect of entrepreneurship education (EE) in the EI and ICSE in undergraduate students from different majors. The review of literature indicated a lack of scientific consensus on the impact on EI and on the ICSE, evidencing the need for continuity of research in the area. A survey was conducted with 491 undergraduate students from different majors at Brazilian universities to compare their EI and ICSE levels, in order to validate a positive effect of EE on EI and its negative effect on ICSE. The present study demonstrated that EE has a non-determinant effect on EI among undergraduate students and has risen considerations about the decrease in the intention to take civil services examinations in the students involved with EE programs.

Keywords: entrepreneurship education, entrepreneurial intentions, entrepreneurialism, civil service examination, university students

RESUMO

O intuito deste artigo é comparar os níveis de intenção empreendedora (IE) e intenção de realizar concurso público (ICP) entre universitários de diversas áreas e avaliar o efeito da educação empreendedora (EE) na IE e ICP de estudantes diferentes cursos de graduação. O referencial teórico abordou a falta de consenso científico sobre o impacto na IE na IE, evidenciando a necessidade de continuidade das pesquisas na área. Foi realizado um inquérito com 491
acadêmicos de diversas áreas de conhecimento em nível de graduação universitário brasileiro para comparar seus níveis de IE e ICP, com intuito de validar o efeito da EE positivo na IE e negativo na ICP. O presente estudo demonstrou que a EE tem efeito não determinante na IE entre acadêmicos dos mais diversos cursos de graduação e proporcionou considerações sobre a diminuição da intenção de prestar concurso público nos acadêmicos envolvidos com programas de EE.

Palavras-chave: Educação empreendedora, Intenção empreendedora, Empreendedorismo, Concurso Público, Estudantes universitários
INTRODUCTION

The need for innovation linked to the need for the vitalization of the economic system, to generate wealth and to keep up with the level of competitive demand that is becoming more potent in the present century, requires competences to make things differently, and, therefore, promotes the propagation and diffusion of courses and programs in the most diverse levels and educational areas aligned with entrepreneurship around the world (KATZ, 2003).

Entrepreneurship requires discipline and dynamism, a process of vision, change, and creation that requires a lot of energy to effectively achieve the goals of implementing innovative ideas and creative solutions, as emphasized by Kuratko and Hodgetts (2004). Furthermore, courses and classes can contribute to stimulate the knowledge and practices in the management and development of the psychological and behavioral competences associated with the entrepreneurial profile (LI, 2006). Which, according to Do Paço et al. (2015), can help on the inventiveness of a new generation of entrepreneurs.

Because of increased awareness of the importance of entrepreneurship content, investments and the consequent expansion in entrepreneurship education has occurred at all levels of education, from elementary (HUBER et al., 2014) to high school (PETERMAN; KENNEDY, 2003), and especially at the university level (KATZ, 2003; KURATKO, 2005).

Due to the wide variety of objectives of each of these programs, as well as the expansion of the offer in different formats and settings (LIÑÁN, 2004), besides the vast quantity of teaching-learning tools and methodologies (SOLOMON, DUFFY; TARABISHY, 2002) there is still no consensus on which pedagogical model generates the best results in EE. (RUSKOVAA; PIHKALA, 2013)

Researchers from all over the world have been researching, for a considerable period, the study of the change provided by entrepreneurship education in entrepreneurship intentionality. (KRUEGER ET AL., 2000; HYTTI; KUOPUSJÄRVI, 2004; MORO et al., 2004; BHANDARI, 2006; SOUITARIS et al., 2007; OOSTERBEEK et al., 2010; FERREIRA et al., 2012; CHEN et al., 2015; FAYOLLE et al., 2015; WESTHEAD; SOLESVÍK, 2016.) However, there are still many questions and doubts about an effective scientific proof of the impact of this relationship. (HONIG, 2004; VON GRAEVENITZ, HARHOFF; WEBER, 2010, LAUTENSCHLAGER; HAASE, 2011.)

In this study, the intention intention to take Civil Services Examinations (ICSE) is identified as the one that the professional objective of job stability as a strategy of insertion in the labor market, however it is important to emphasize that this does not necessarily ensure permanence in public office, due to personal motivation and professional insatisfaction. (ALBRECHT, 2010; KLEIN; MASCARENHAS, 2016.)

Is there a difference in the EI among students from different undergraduate majors, after the contact with EE? Such questioning is important to comprehend the impact of EE in EI, based on the pedagogical proposals of each undergraduate major and considering the need to develop specific skills and attitudes of the entrepreneurial individual. Despite the visibility and importance of studies on entrepreneurship and its recent advances, they lack a more robust discussion.

In this way, the present study intends to compare the levels of entrepreneurial intention among students of several areas of university knowledge, initially to identify which undergraduate major (Business Administration, Engineering, Accounting, Pedagogy, or Hospitality industry) has students with the highest entrepreneurial intention, to later evaluate the effect of entrepreneurship education on the entrepreneurial intention of students from these different undergraduate degrees.

Therefore, this paper presents a relevant theoretical contribution to the theme to which it is proposed, in the analysis between entrepreneurial intention and the intention to
take the civil services exam. The literature review points to this path regarding entrepreneurship education as a propeller of economic development, and this article seeks to validate the hypothesis that entrepreneurial education programs maximize or not the entrepreneurial intention.

To this end, this study is going to carry out a broad review of the literature on entrepreneurship education and its impact on the individual’s entrepreneurial intention, approaching the issue of civil services exams to validate the hypothesis that the EE decreases the intention to take the civil services exam (ICSE). In this way, it will allow the development of an agenda for future research specifically in entrepreneurship education in different areas of knowledge at university level.

**LITERATURE REVIEW**

According to Lopes and Teixeira (2010), to develop the capacity to innovate, retain knowledge, develop own projects, and deal with change are the recommendations of the United Nations Educational, Scientific and Cultural Organization (UNESCO) for entrepreneurship education. It is present in the discussion agendas worldwide, and thus deserves and occupies a prominent place in both economic and academic aspects (UNCTAD, 2015, LIMA et al., 2015).

The focus on entrepreneurship given to the economic development in many countries of the world highlights the importance of research and investment in this area (NAUDÉ, 2013). Katz (2003) admits the understanding that the first phase of the process of proliferation of courses and classes on entrepreneurship occurred in the 80s. At that time, more than 300 US higher education institutions offered courses or classes exclusively on this topic. This number tripled, according to Solomon et al. (1994) in the next decade, reaching the extraordinary number of 1050 institutions that offered programs with this teaching-learning objective.

For developing countries in precarious economic situations, entrepreneurship has an even greater impact on the generation of wealth, business opportunities, and the creation of new jobs. Therefore, it has been increasingly stimulated and encouraged through public policies for regional economic development (PREMAND et al., 2016). This is how entrepreneurship education has been conquering the world.

Solomon et al. (2002) presents the understanding that the variety of methods of teaching entrepreneurship comes from the needs diagnosed in the market. Jones and Matlay (2011) present the main methodologies in entrepreneurship education: debates, projects with clients, and cooperation with companies, as well as seminars, workshops, and hands-on training capable of developing entrepreneurial attitudes based on simulations.

Still within entrepreneurship education, Curran and Stanworth (1989) classify the EE into four categories: training for micro, small, and medium entrepreneurs; specific training for owners of micro, small, and medium enterprises; information on small and medium-sized enterprises (SMEs); and, education with an interest in awakening the entrepreneurial intention and offering of the knowledge necessary to achieve this interest. Liñán (2004) adds for improvement and suggests the inclusion of four other areas of study: education for entrepreneurial dynamism; specific and continuous training of the entrepreneur; education for start-up; and, theoretical knowledge about entrepreneurship.

In the studies of Cheung and Au (2010), Elmuti et al. (2012), and Peterson and Limbu (2010), entrepreneurship education aims to train students through the instrumentalisation of the practices and the experience of real situations. Without neglecting the relevance of all the practice and simulation required in the process of maturation and implementation of entrepreneurship education, conceptual aspects should not be forgotten. For Welsh et al. (2016), the conceptual changes on entrepreneurship also undergo transformation, and therefore Lautenschläger and Haase (2011) attribute two approaches to entrepreneurship education: a
theoretical one with research and knowledge on the subject, and a practical one.

For Morris et al. (2013), entrepreneurship education stimulates entrepreneurial intention, because from this knowledge students can believe in their competence for organizational performance in a competitive market and thus, feel encouraged to bet on a business of their own. Entrepreneurial intention depends on personal and environmental factors, as it makes the individual responsible for a new business (Krueger, 1993; Fayolle et al., 2015).

Bhandari (2006), Barkotic and Kruzic (2010), Byabashaija and Katono (2011), Li (2006), Ferreira et al. (2012), Oosterbeek et al. (2010), Peterman and Kennedy (2003) and Souitaris et al. (2007) are examples of studies that show some relation between entrepreneurship education and entrepreneurial intention. The models capable of measuring this relation are: (i) Ajzen's theory of planned behavior (TPB) (1991), which identifies three antecedent attitudes to the actual existence of intention: the personal desire to perform certain behavior, social perception about the performance of a given behavior, and behavioral control; (ii) Shapero's "Entrepreneurial Event Model" (SEE) developed in 1982, which was clearly conceived as a model of specific intentions related to the act of entrepreneurship.

In the SEE it is assumed that inertia is the guide to human behavior up to the moment that something interrupts or changes this movement and includes as variable the individual's desire to have his or her own business (verifying intra and extra-personal impacts) and the capacity of one to perform this desire (Scherer et al., 1989; Shapero, 1982). However, Krueger et al. (2000) consider that the TPB and the SEE are two equivalent models that are valuable tools to analyze the process of creation of companies.

Honig (2004) points out that even with the great amount of research carried out to prove the relationship of EE with the increase of the EI level of its participants, the theoretical and empirical disagreements about this correlation still exist.

Martin et al. (2013) developed a meta-analysis from 42 studies, based on data from the main academic journals of business and management education in the United States, and concluded that it is possible to prove the existence of the correlation between EE and EI. However, in the same year Rideout and Gray (2013) published a research using data collected from work on entrepreneurship education between 1997 and 2011, in which they attest that it is not possible to validate the existing cause-effect relationship between EE and the entrepreneurial intention of the participants. In a contrasting result to those of Rideout and Gray (2013) the meta-analysis performed by Bae et al. (2014) in 73 studies with a total of 37285 responses found a significant correlation between entrepreneurship education and entrepreneurial intention.

Due to the lack of scientific consensus regarding the influence of entrepreneurship education on entrepreneurial intent, Ruskovaara et al. (2016) and Welsh et al. (2016) believe that it is necessary to carry out new studies on the subject to concretely clarify the existing conflict.

Another field of study to be further explored is the validation of the EE relationship with ICSE, in order to identify if the impact on the intention of take civil service examination of the participants of entrepreneurship programs is effectively negative. Silva (2015) points out that more far-reaching research in the area of civil service examinations is yet to be made in Brazil. Academic and journalistic community over the years has been requesting the government instances for information such as: how many people have registered in civil service examinations in Brazil, what is the profile of the candidates, which examinations are the most sought, how long do candidates take on average until they pass in an examination and so on (Silva, 2015).

Currently there is no data that can generate satisfactory indicators for descriptive analysis, since what exists is an effort, according to Silva (2015), for the (relative) count of present and future vacancies, salary bands, the most evident work positions, and other information
that does not allow for more detailed analysis based on historical data.

Silva (2013) also presents data from a research conducted in Rio de Janeiro that criticizes the elaboration and application of the tests in federal civil services examinations and argues that they are not enough to effectively evaluate the candidate’s experiences and knowledge. In addition, he judges the selection process not to be congruent because it does not result in choosing the appropriate professional for the position in the public administration, but rather in the appreciation of the difficulty and in the greater number of tests taken.

Although the exact number of Brazilians who apply for the civic services examinations is unknown, Albrecht (2010) emphasizes that the search for it is due to the benefits of a stable job and it is currently a strategy to enter the contemporary job market. Klein and Mascarenhas (2016) investigated the motivational dynamics in public servants in order to reveal the reasons that cause the evasion and professional dissatisfaction in public work, emphasizing that stability as a professional objective does not determinate the permanence in public office.

In the meantime, Maresch et al. (2016) emphasize the importance of future studies on the effect of entrepreneurship education in the most diverse areas of study at university level, due to the differences in the profile of students and consequent distinction in the results obtained in studies with students from different majors and different expectations for professional placement in the current dynamic job market. In addition to the need to validate the effect of EE in EI, it is essential to begin analyzing the impact that exists among those students who have participated in entrepreneurship programs during their ICSE.

METHODOLOGY

The methodology corresponds to the association of procedures used for the research in its scientific accuracy, allowing to deepen the approach (Almeida, 2011) and to base itself on the formulated problem, thus showing the distinct categories contemplated in its taxonomy (VERGARA, 2014; BEUREN, 2006). This chapter of the paper portrays the methodology used in the research, as well as the method applied, the type of study, and the selection of subjects. For this purpose, the characteristics, procedures, data collection, and data analysis were used to present the results obtained.

In the methodological classification is the objective of the research in what concerns the nature of the research and the nature of the objective; the theoretical basis of research; research process regarding data collection and approach to the problem; research results and technical procedures.

The present research has the purpose to be exploratory and descriptive. Since it is a review of published academic papers on entrepreneurship education and entrepreneurial intention and the methodologies used to reach the research objectives, ascertaining and perceiving the facts without modifying the information found (ANDRADE, 2010); and exploratory since it does not intend to instantly solve the problem (RUIZ, 2008), but to seek detailed knowledge about entrepreneurship and raise the researcher's intimacy with the content (MARCONI; LAKATOS, 2015).

It is characterized as a practical study, as to the nature of the research. The present work is based on the thorough investigation of the reality of university students, participants of the entrepreneurship education programs, from the most diverse majors and areas of knowledge concerning entrepreneurial intention (YIN, 2010). And, regarding the result of the research, it is considered to be applied, because it generates knowledge in response to the solution of specific problems in a specific situation (GIL, 2010).

Deductive logic leads this research. According to Richardson (2008), this is part of a defined conceptual and theoretical framework on entrepreneurship education and entrepreneurial intention for application in the established sample, thus, takes knowledge from the facts to understand them. Candidate et al (2011), corroborate when they teach that the
fundamental objective of the deduction is to establish already determined demonstrations, and, Andrade (2010), emphasizes that the deductive method moves from the general thought to a specific one as a way to anticipate confirmations coming from theories.

The data was collected in primary classification, using a questionnaire with previously constructed questions (SEVERINO, 2007). Therefore, the approach to the problem is predominantly quantitative, with qualitative perspectives of analysis. Quantitative since the collection instrument was made available online and its results were analyzed using SPSS 24 software, a well-known statistical method of analysis. And, also qualitative, because the results are presented in a descriptive way as a direct source of data and information (ALMEIDA, 2011).

As for the technical procedures, the data collection technique used was a survey, considering that the obtaining of the information comes directly from the group of people that the research objective aims to comprehend (RICHARDSON, 2008; BEUREN, 2008; GIL, 2008; COOPER; SCHINDLER, 2011).

Before the questionnaire was sent to the students that composed the research sample, two pilot tests were performed. Answered by thirty students, the first test measured the correct understanding of the questions and information required. After some punctual improvements, a new test was applied to validate the questionnaire with twenty other students. Thus, the purpose of the pilot test, according to Richardson (2008) to rectify and guide aspects of the investigation, was fulfilled.

The questionnaire as a research instrument was applied to 491 undergraduate students, 260 were female and 231 male, in 2016, of university courses of Business Administration, Accounting, Environmental and Sanitary Engineering, Civil Engineering, Mechanical Engineering, Production Engineering, Hospitality Industry and Pedagogy. The survey was structured with fifty closed questions, divided into four blocks of questions applied at the end of the first half of 2016 using SPSS Statistics 21.

In order to facilitate the usage and to corroborate with the psychometric consistency of the study, according to Costa (2011), the questionnaire uses the Likert verification scale in 5 points. Cooper and Schindler (2011) consolidate this understanding and affirm that this scale allows to specify a parameter between being favorable or unfavorable towards the object of interest of the research objective, which Richardson (2008) calls positive and negative affirmations.

RESULTS

As a way to achieve the general objective of this study of analyzing the entrepreneurial intention and the effects of entrepreneurship education in the students participating in the research, this section analyzes and discusses the results of the research.

Specifically, the purpose of this research is to assess separately the entrepreneurial intentions and the intentions to take civil services examinations in Brazil before and after contact with EE, in different undergraduate courses of a Higher Education Institution, and the analysis of Tables 1, 2 and 3 demonstrate the achievement of this objective.

The analysis of the data starts with Table 1, which presents the level of Entrepreneurial Intentions among students of different undergraduate courses. It is possible to extract as a result that in the courses of Business Administration and Production Engineering there was an increase on the levels of EI from the impact of EE in the university environment. In the Accounting course, there was a non-significant reduction, but that reflects that there was no relation between EE and the desire to be entrepreneur.
Table 1 Analysis of the Entrepreneurial Intentions.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Before EE</th>
<th></th>
<th>After EE</th>
<th></th>
<th>% between averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>n</td>
<td>Standard Error</td>
<td>Average</td>
<td>n</td>
</tr>
<tr>
<td>Business Adm</td>
<td>3.46</td>
<td>48</td>
<td>1.458</td>
<td>3.78</td>
<td>51</td>
</tr>
<tr>
<td>Accounting</td>
<td>3.93</td>
<td>70</td>
<td>1.365</td>
<td>3.87</td>
<td>45</td>
</tr>
<tr>
<td>Production Engineering</td>
<td>3.66</td>
<td>29</td>
<td>1.610</td>
<td>3.85</td>
<td>40</td>
</tr>
<tr>
<td>Average among courses</td>
<td>3.68</td>
<td>147</td>
<td>1.478</td>
<td>3.83</td>
<td>136</td>
</tr>
</tbody>
</table>

Results show that after the contact with the EE, almost all the courses had an increase in the entrepreneurial intention, except the Accounting course, that presented a decrease of 1.5% in this intention. Considering the average among all the three courses, the entrepreneurial intention increased by 4.1% after the contact with the EE.

Emphasis is given to the importance of EE in the Business Administration course for the training of graduates with entrepreneurial potential, following the UNESCO recommendation for the social and economic development of the countries. (UNCTAD, 2015, LIMA et al., 2015).

Table 2 Analysis of the Intention to take Civic Service Examination

<table>
<thead>
<tr>
<th>Courses</th>
<th>Before EE</th>
<th></th>
<th>After EE</th>
<th></th>
<th>% between averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>n</td>
<td>Standard Error</td>
<td>Average</td>
<td>n</td>
</tr>
<tr>
<td>Business Adm</td>
<td>4.02</td>
<td>48</td>
<td>1.263</td>
<td>3.51</td>
<td>51</td>
</tr>
<tr>
<td>Accounting</td>
<td>3.66</td>
<td>70</td>
<td>1.350</td>
<td>3.73</td>
<td>45</td>
</tr>
<tr>
<td>Production Engineering</td>
<td>3.83</td>
<td>29</td>
<td>1.037</td>
<td>4.00</td>
<td>40</td>
</tr>
<tr>
<td>Average among courses</td>
<td>3.84</td>
<td>147</td>
<td>1.217</td>
<td>3.75</td>
<td>136</td>
</tr>
</tbody>
</table>

Table 2 presents the level of Intention to take Civil Service Examinations, before and after the programs in entrepreneurship education. For this same research group, the EE impacted considerably the level of ICSE only in the Business Administration course, corroborating with the information reported in Table 1. In the Accounting and Production Engineering courses, the EE did not result in the decrease of the levels of ICSE, allowing the analysis by analogy with the studies of Rideout and Gray (2013) on EI.

Furthermore, it is possible to perceive that after contact with the EE there was a large decrease in the intention of the Business Administration students in taking civil service examinations, different from the Accounting and Production Engineering students that presented an increase of 1.9% and 4.4% respectively. Considering the average among the three courses, the intention to take civil service examinations dropped 2.3% after contact with the EE.

The last analysis of results shows the relationship between Entrepreneurial Intentions and Intentions to take Civil Service Examinations. According to the data presented in Table 3, it is possible to perceive a 1.1% increase in EI and a 2.6% reduction in the ICSE after students had contact with EE.
Thus, a research was carried out with the purpose of finding data and reasons that make this reduction happen, but no indicators were found that could aid in the analysis in order to understand if this reduction was the reflection of EE alone, or some other aspect related to the civil services examinations in Brazil.

Overall, it was possible to perceive that entrepreneurship education has the power to open new horizons for the students that participated in EE programs, especially those in Business Administration, creating in them the intention to generate value to a society that needs a youth who is willing to make significant changes in Brazil rather than just achieving professional stability in their careers.

CONCLUSIONS

The aim of this article was to compare the levels of entrepreneurial intention (EI) among university students from several areas of knowledge and to evaluate the effect of entrepreneurship education (EE) on the EI of undergraduate students in the majors of Business Administration, Accounting, Engineering, Hospitality Industry, and Pedagogy, as well as their intention to take civil service examinations.

The study was restricted to some areas of knowledge within these undergraduate courses, Business Administration, Accounting, and Production Engineering.

This study provides empirical evidence of the impact of entrepreneurship education on EI among students from different areas of knowledge in higher education institutions in Brazil, especially in the Business Administration major, and also provides concomitant inferences about the decrease in the intention to take civil service examinations. With the result of this research, it was possible to prove that there was no profound impact between the entrepreneurship education and entrepreneurial intention in the students involved in this research, which follows the studies published by Rideout and Gray (2013).

The present study also presented results regarding the intention to take civil service examinations. The impact of the EE reflected positively on the entrepreneurial intentionality and negatively in the intentionality to take civil service examinations. Even though it does not show a profound impact between the EE and the entrepreneurial intention, EE had a greater impact in the decrease of the intention to take civil service examinations.

The present study also showed that, after participating in EE programs, students from different undergraduate areas, such as Business Administration, Accounting, and Production Engineering, tend to have very similar EI indexes, with no significant variations between them, a different result from those who have never participated in entrepreneurship courses.

According to the data presented in the results, it was possible to perceive an increase of 1.1% in EI and a reduction of 2.6% in the intention to take civil service examinations in those students who had contact with the EE. These results are corroborated by the studies by Honig (2004) Von Graevenitz, Harhoff and Weber (2010), and Lautenschläger and Haase (2011), who affirm that it is not possible to have a conclusive and effective result on the effect of entrepreneurship education on the individual’s entrepreneurial intention.

It is attractive for this academic area of study to repeat the research on the relationship between entrepreneurship education, entrepreneurial intention, and the intention to
take civil service examinations in different undergraduate courses in other regions of the world in order to, in larger dimensions, verify if the obtained results can vary according to socio-economic characteristics or according to the pedagogical projects of each undergraduate course.

Future studies in the area may also seek to deepen this variation of the effect of entrepreneurship education, among other courses and evaluate the teaching-learning methods adopted as suggested by Solomon et al. (2002), to understand what are the limiting factors of EE in EI in undergraduate students of the Institution of Higher Education. Therefore, this was the restraint of the present research, since it did not analyze the teaching methodology of the EE program and, therefore, the methodological impact in the influence on the entrepreneurial intention of its participants.

Therefore, the present study was important in identifying and validating the relevance of entrepreneurship programs in the promotion of entrepreneurial intention within undergraduate courses in Brazilian higher education institutions, which should encourage the investment in these programs by educators, university managers, private companies, and public policies with the purpose of fomenting entrepreneurship and consecutively seek to leverage economic and social growth in those localities.

In an innovative way, this article demonstrated for the first time that participation in entrepreneurship programs had a negative influence on the ICSE of Business Administration undergraduates, solidifying the importance of these projects to diminish the interest of these students in the public service. However, in the other courses analyzed this relationship could not be validated.

As a point to follow, this study directs to a deepening of the EI analysis in different methodologies of teaching of entrepreneurship programs, identifying the variations of results in the most diverse formats. It also indicates the need to understand the variation perceived in EI and ICSE in undergraduates from different areas after the contact with the EE, what other factors could be interfering in this relationship. This way, it would be possible to identify and understand what factors and types of entrepreneurship programs have positive effect of EI and negative of ICSE on its participants and shape them according to the goals to be achieved in each undergraduate course.

AUTHORS CONTRIBUTIONS
DP coordinated the team of authors from the conception of the research, participated actively in literature review, in the treatment of the collected data and in the review and approval of the final document. EM made a significant contribution to literature review and data analysis. HO played an important role in data collection and analysis.

CONFLICT OF INTEREST
No potential conflict of interest was reported by the authors.

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