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CREATIVITY INHIBITORS IN HIGHER EDUCATION: A STUDENT PERSPECTIVE

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ABSTRACT

This article presents the inhibitory factors perceived by Business Administration students to the promotion of adequate conditions for creativity expression and development in professional training. It investigates the factors inhibiting the promotion of creativity in Higher Education, pointed out individually in the literature, but also investigates them collectively in three groups: board of the higher education unit, pedagogical coordination and teaching staff. The research was carried out in Higher Education Institutions (HEI), both private and public, with the participation of 262 students. The results indicated that the main factors inhibiting creativity promotion are those related to the board and the teaching staff of HEI. Individually the three main inhibitory factors pointed out by the students were: scarcity of material resources, high number of students in the classroom and presence of undisciplined students that disrupt teaching work. It should be noted that the perception regarding inhibitory factors did not vary among students from public and private institutions.

Keywords: Inhibitory factors. Development of creativity. Higher education.

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INTRODUCTION

The abilities to create, innovate and differentiate oneself are key factors to the professional entrepreneur, who must be prepared for both environmental demands and changes. Imposing to the Business Administration students the need to develop their creative potential. The demand for creative professionals, competent to establish efficient strategies, identify opportunities, approach and resolve unpredictable problems, have been the emphasis of enterprises, as observed by Alencar (2010) and Cropley (2005), amongst other authors. Thus, according to Bilton (2007), creativity enables the professional to act on opportunities in a way to generate competitive advantage for the enterprise. That is, creativity paves the way for enterprises growth and innovation.

In the higher education scope, countless scientific papers evidentiate the search for creative methods, didactic and *praxis*, aiming to answer several questions such as: the way creativity occurs in higher education; identifying the creativity role in teacher *praxis* and how to produce a creative action to impact teacher action. In this sense, according to Abreu and Masseto (1990); Pimenta and Anastasiou (2002); Anastasiou and Alves (2003); Zabalza (2004) and Barreto (2007), the effective knowledge transfer based on teaching to the teaching based on creativity and learning, leads teachers to a double competency: the scientific competency, as trustworthy scholars in the scientific taught scope; and the pedagogic competency, as people engaged with students learning and training.

Amongst the different questions researched on the "Creativity in Higher Education" theme, we highlight the following: students creative thinking skills (CHEUNG ET AL., 2003); evaluation on creativity level, for both alumni and professors (ALENCAR, 2002); attributes of the creativity facilitator or inhibitor professor (ALENCAR, 2000); personal creativity barriers (ALENCAR; MITJÁS MARTÍNEZ, 1998; ALENCAR; FLEITH; MITJÁS MARTÍNEZ, 2003); college students and professor perception regarding teaching efficiency and creativity (SOUZA, 2001); college students and professor perception regarding innovative teaching (JASKYTE; TAYLOR; SMARIGA, 2009); college students and professors perception regarding favorable conditions to promote creativity (ALENCAR; FLEITH, 2008b; SOUZA, ALENCAR, 2006); creativity expressions, self-evaluation on the creativity level and also on ways to stimulate and develop both professors and alumni creativity (PARNES, 1988; ALENCAR 2002; CASTANHO, 2000) and; the important research on creativity inhibiting factors in higher education (ALENCAR; FLEITH, 2010).

As for the execution of specific studies on barriers for creativity promoting in Higher Education, Alencar and Fleith (2010) highlight the studies of Jackson et al. (2006), Edwards, McGoldrick and Oliver (2006), Fryer (2006) and Alencar e Fleith (2008a), which have pointed out possible creativity inhibiting factors in higher education, such as, resistance and attitudes of both faculty and alumni; organizational elements of structural, cultural, and procedural nature; and government policies.

It is noticeable that the studies sought to understand creativity under the teaching pedagogic point of view and teaching efficiency. Making more necessary the carrying out of studies seeking the student point of view, in a way to comprehend the relationship of these students with the structure, pedagogic practice and faculty members of the higher education units.

From the work developed by Alencar and Fleith (2010), about the elements perceived by faculty members as inhibitors to promoting adequate conditions of developing and expressing student creativity, it was established as problematics for this study identifying the inhibiting factors to promote and develop creativity in higher education from the student perspective. For

such an endeavor, the general research goal is to identify the main inhibiting factors (barriers) for promoting and developing creativity in higher education, from a research with college students in the business administration course.

This work is structured in four sections: the first one consisting on this introduction, where problematics and research goal are presented; the second one approaches the theoretical concepts that grounds this research; the third one where the methodology used is described and, finally, in the fourth section the results are presented and final remarks are made.

THEORETICAL REFERENCE

2.1 Understanding creativity

The study concerning creativity reached considerable progress since Milfor Brad (in Graham's Magazine in 1829) considered that, if blood supply to the brain was the most important factor for genius, the red hair consisted on an observable genius characteristic (FRIEDEL, 1992). Posteriorly, even preceded by works such as the ones from Vasary, in 1568 (BOORSTIN, 1993), and the Socrate study made by Lélut, in 1836 (PRENTKY, 1989), it is to the book "Hereditary Genius" by Sir Francis Galton, in 1870, that the beginning of the creativity study is attributed to.

According to Piirto (1992), under the etymological optics, the words create and creativity are related to the Greek word *greer*, which means to produce and grow; and to the Latin word *crescere*; and to *Ceres*, the roman goddess that brings the meaning of growing from the land, or even, to come to existence from inertia**.** To him, the meaning of what 'creativity' is can be constructed from the adding of some elements, such as curiosity, ability to see things through an unusual angle, self confidence, humbleness to perceive self limitations and the ability to perceive the usefulness of an idea.

For Galton (1979) excellency in several domains presented a common set of causes, such as innate capacity; willingness to work; and an adequate power to accomplish a very laborious work, referring to intelligence. Considering that for Amabile (2001), intelligence is accepted as being only one of the creativity components, a necessary one, but not enough for its effectiveness. For her, the social value of creativity is only established when associated with the ways by which society recognizes creativity.

Runco (1995) explains that the several existing theories about creativity can be grouped in ten categories which systematize its comprehension. That is: developmentist: creativity is developed through time; psychometric: creativity may be measured; economical: the creative idea is influenced by market forces and cost and benefits analysis; stage and process: the creative expression comes through stages or components; cognitive: creative thoughts are essential for creativity; problem solving and experience base: creative solutions from a rational process; problem searching: creative people act proactively and the exploratory process of identifying problems to be solved; evolutionary or Darwinian: creative evolution similar to the Darwinian process; typological: creations vary according to individual differences; and system: creativity is the result of a series of interactive and interrelated factors.

Therefore, creativity may be investigated by varying approaches, being the most used the one which considers the named 4Ps (Person, Process, Product, Press), proposed by Rhodes (1961). In this approach, creativity is considered as a phenomenon, on which a person communicates a new concept, the product. The person comes to this product through a mental process, and since no human live nor operates in vacuum it is necessary to consider the environment

(PEARSON, 2011). Then, as proposed by Christian De Cock (1993), when referring to Mackinnon's (1963) initial proposal, when investigating the creativity constructo, it is necessary to deal with the person, the process, the product and the creative environment.

More recently Csikszentmihályi (1990)) and Gardner (1994) proposed a division for the creativity study, according to the field aspects, individuals and institutions judging the products; domain, structure and practices associated with a given knowledge field; and the individual. Sternberg and Lubart (1995) proposed the study of creativity encompassing six aspects: intellectual capabilities, knowledge, thinking style, personality, motivation and environment.

Two analysis levels are usually presented as part of a continuum, between one pole in which creativity may be seen as only "to do better what is done", the creativity with a "c"; and the opposing pole, creativity with a "C". Creativity with a "c" would constitute of the study engine of processes aimed to develop it in individuals and, creativity with a "C" would be the constructo from which the whole phenomenon comprehension must be seen as complementary to the first one, being applicable, beyond individually, in groups, organizations and societies. Therefore, it is considered that creativity presupposes active communication, under persuasion, as stated by Simonton (1991) to create and to lead are forms of communication.

2.1.1 The creative person

One of the most recurring questions on studies about the creative person, refers to the possibility of whether creativity can be learned or not. For Terra (2012), the answer is not so simple and requires a deepened reflection over what creativity comes to be. The author highlights that there is no trustworthy test to quantitively and precisely measure the creativity of a person. For him, creativity manifests itself in different ways, and the only way for its measurement is the acknowledgment of other people.

However, Terra (2012) considers that is altogether possible to make someone be more creative, once creativity reveals itself from innovative combinations and associations of plans, models, feelings, experiences, associations and facts. Becoming essential to create opportunities and to encourage individuals to try new experiences, to test new hypothesis and, especially, to establish new ways of dialogue with people with different training, with other kinds of experiences and cultures.

From what was exposed, it is clear that several other authors defend the idea that people become creative according to the context where they are inserted, on which they undertake a preponderant role. According to the studies made by Ferreira and Candeias, quoted by Runco (1995), each individual has the potential do be creative, but not all use this potential due to lacking opportunities to develop it.

2.1.2 The creative process

According to Stein (1989), a creative process is what happens in an individual, or amongst individuals and is also perceived by others, aiming to create a product or a creative response. These processes may be primary of free association, like a dream; or secondary of rational thoughts, reality oriented.

The most known creative process model occurs in four distinct phases, that are: preparation, the phase corresponding to information gathering about a problem; incubation, phase corresponding to a distancing from the problem; illumination, phase on which the person comes

to the solution of the problem; and verification, phase on which adjustments to the found solution are made. However, with the evolution of studies about the creative process, some researches consider that the phases of illumination or inspirational phenomenon do not exist (FRYER, 1996), concluding, that creative people develop thinking processes in the same way as the so called common ones (WEISBERG, 1991).

2.1.3 The creative product

According to Amabile (2001) a product or a response may be categorized as creative as it constitutes itself, simultaneously, in a novelty or a useful or valuable response to accomplish the task in course, as long as it is a heuristic response and not a finite sequence of actions to be followed in a mechanic way. This way, the notions of value and originality are the great differentials when acknowledging a creative product.

The notions of value and originality refer to the definition made by Rothenberg (1990) about creativity. For the author, the creative product is the creativity resulting action, is the capability or state that makes creations and new products with value. It is possible to conclude that creativity exists by the sheer appearance of an idea, that is, what is mentally perceived and not through the senses, being this constituted by objects, by the relations between these objects, or by the mental images of these objects. Creativity is, then, a product of thought on attempting to establish an order in the perceived world, in the form of a product or a response.

It is even considered, the existence of a contrast between intrinsic and extrinsic motivation in obtaining a product or a response. The intrinsic motivation acts so the individual will develop his or her skills with a lot more creativity and passion, while the extrinsic motivation acts on the means to reach the result. As exemplified by Amabile (2001), work is a mean for earning money, therefore, the state of intrinsic motivation brings creativity on its execution, but the extrinsic motivation state is that work is exhausting, that is, harmful to creativity.

2.1.4 The creative environment

For Alencar and Mitjáns Martínez (1998), there is the need on the organizations side to relate to creativity, due to its importance in the process of change, instability and competition, once creativity collaborates with innovations development. However, for the authors, many organizations fail to meet this need, mainly, in the sense to minimize barriers found on environments. The creative activity can only be fully performed in a liberal and open environment, independent to exterior, material or moral embarrassments (ALENCAR; MITJÁNS MARTINEZ, 1998). That is, creativity can only survive where the environment is favorable to the process as a whole.

Under these conditions, the authors have highlighted the need for creative leaders in the organizations, who would be responsible to cultivate a creative environment, facilitating the rise of new creative ideas by promoting a supportive environment to innovative ideas. There are nine factors are pointed out which made a society more favorable to generating new ideas, which are: availability of cultural means; openness to cultural stimuli; existence of internal tensions driving the individual to question *status quo*; free access to cultural means; liberty; exposition to different cultural stimuli; tolerance to opposing views; interaction between important personalities who confront and enrich one another; and the existence of incentives and awards.

It is considered then, according to Guilford (1950), creativity may be understood as a universal skill that needs to be acknowledged and developed. What makes necessary the devel-

opment of a platform for creativity to be present in organizational environments, that is, as stated by Alencar and Martinez (1998), for the organizations to be able to acknowledge potentialities and to provide conditions for the development of creative ideas.

2.2 Creativity Inhibitor Factors in Higher Education

Apparently, the relation between education and creativity occurs in a natural way, but according to Plucker, Beghetto and Dow (2004), in many situations, this is not what it seems to happen, especially facing the paradigm changes the knowledge society is imposing. For Sternberg and Lubart (1995), this will probably make it essential to the restructuring of the educational system, with adoption of new concepts and practices that prepare and qualify the new professionals to meet the challenges of the work marketplace. The precepts such as integrity and individuality must be observed providing professionals the full development of their potentialities.

Hargreaves (2003) clarifies that knowledge society, when leaning on new technologies, is in fact in constant evolution, enabling individuals to have the opportunity to live situations that encourage them to be creative and brings as a consequence the forming of a new identity which will translate itself in high levels of personal satisfaction and productive efficiency. Thus, it is necessary from the staff responsible for managing Higher Education Institutions (HEI), to reduce spaces and any teaching unit where the environment is hostile, or simply, indifferent to new ideas, once it is very unlikely that in such a place creativity may be developed.

In accordance to Alencar and Fleith (2010), some studies were highlighted where their goal was to identify barriers to creativity use in higher education. Amongst them, the studies made by Jackson et al. (2006) stood out, where he considered as inhibitor factors as barriers the resistance from both teachers and students, structural nature elements, processual culture, time and public policies. And, Edwards, McGoldrick and Oliver (2006), when researching teacher perspectives relating to creativity use in the classroom, they discovered teachers were afraid to take risks, due to the existence of a non-tolerant to failure culture.

When conducting his studies about the creativity inhibitor factors in higher education, Freyer (1996) identified in his research, with ninety professors of a HEI, that the presence of inadequate resources; the excessive workload; the inadequate time for preparing classes; the large quantity of students in a classroom; insufficient time for contacting students were considered by them as elements inhibiting creativity expression in higher education. Moreover, from the Alencar and Fleith (2008a) study about the facilitator and inhibiting factors of the individual creativity of engineering students was pointed out as a barrier the distance between the university and the marketplace.

According to Alencar (2002) there are still other barriers pointed out by the teaching staff: the lack of skills in the student relations, that prevents them from creatively express themselves; not knowing how to adequate their speech to their age range to make communication more efficient; not feeling prepared enough to control student discipline; the inability to prepare diversified classes, as a way to make classes more enjoyable, by fear of harming class content.

For Moreira (2007), the learning environment is a place previously organized to promote learning opportunities. And as such, it is constituted in a unique way, as it is an environment socially build by teachers and students, from the interactions they establish amongst themselves and with the other material and symbolic sources of the environment. In this sense, another

barrier was raised by the researchers Alencar e Fleith (2010), when, interviewing teachers about facilitators and inhibitors of personal creativity; about the environment elements and personal variables that facilitate or hinder creativity expression, raised the hypothesis that the pedagogic *praxis*, that is, the way teaching is conducted, also corresponds to an inhibiting factor of creativity promotion in higher education.

METHODOLOGY

For the development of this work, the quantitative methodology was adopted, which, according to Malhotra (2001, p.154), corresponds to "a methodology that provides insights and comprehension of the problem context [...] seeking to quantify data and applies some sort of statistical analysis". This way, the researcher may establish the meaning of a phenomenon from participants viewpoint (CRESWELL, 2010).

As for its objective the study is characterized as descriptive. This kind of research has as main goal to describe the characteristics of a given population or phenomenon or the establishment of relations between the variables (GIL, 2014). Due to the fact that data collection for this research was only performed once, this study is also categorized as a study of transversal cut (HAIR ET AL., 2005).

Business Administration students were adopted as research unit analysis from two Private Higher Education Institutions (HEI) both, located in São Paulo state, and one Public Institution located in the Maranhão state, chosen intentionally. Business Administration students from the Public Institution of São Luís do Maranhão and from the Private Institutions of Cotia city, in the state of São Paulo participated in this study. The population of participant students in this research was a total of 262 students, 141 (53,8%) masculine and 121 (46,2%) feminine. From this total, 93 students (24,7%) studied in a public university and 169 students (63,3%) in a private higher education institution. The participants age ranged from 17 to 44 years.

Regarding the data collecting method, a questionnaire with a list of inhibiting factors to promoting creative settings in learning was used. This list of inhibiting factors corresponds to an adapted list from the one used in the research developed by the professors Alencar and Fleith (2010). Some inhibiting factors from the original list were not included because they were not pertinent to the present study. Different from the research developed by Alencar and Fleith (2010), the questionnaire was composed in a way to enable the obtain aggregated information of the inhibiting factors in three groups: higher education unit board, pedagogic coordination and teaching staff.

A Likert-like 5 points scale was used to measure the degree of concordance from the students who answered the questionnaire. The concordance or not to the evaluated factors was verified through the students answers frequency, where the smallest value indicated total disagreement and the highest value represented total agreement with the statement presented. The intermediary point was treated as indifferent.

Concerning data collection, a pilot study with 10 students from the business administration course in a public university in the Maranhão state was conducted, to ensure clarity in instructions and to identify possible needed reviews in the questionnaire items structure. Student participation was voluntary and in compliance with the ethical demands, being assured the confidential character of the provided answers, once data were analyzed in a collective way. The questionnaire was answered individually, with a researcher present, maintaining the conditions quoted by the original study. Data collection occurred from August to October in 2014. For data

analysis, the frequency and percentage for each questionnaire item was calculated, presenting the general total, total by gender and the kind of higher education institution, whether a public or a private one.

RESULTS AND DISCUSSION

Differently from the study developed by Alencar and Fleith (2010), in the present work was chosen to aggregate inhibiting factors to promoting adequate conditions to express and develop creativity in three different groups, that are: boarding, pedagogic coordination and professor staff in the higher education institution. As described in the methodology, this research was conducted with the students from the institutions.

The grouped result of these factors is presented on Table 1. This result becomes more important as it demonstrates that the inhibiting factors, according to the students perspective, are distributed on the three groups homogeneously, with a light stress towards higher education institutions (36%), probably due to the students higher degree of liberty when answering questions related to the HEI boarding.

Table 1: Inhibiting factors to promoting adequate conditions to creativity development and expression (boarding, coordination and teaching staff)

Inhibiting factors aggregated	Perc.
Factors related to the Higher Education Institution board	36%
Factors related to the Higher Education Institution pedagogic coordination	31%
Factors related to the Higher Education Institution teaching staff	33%

Source: Research Data

Table 2 presents the frequency and percentage of questionnaire answers of the inhibiting factors in promoting creativity in higher education under the students perspective. The main barriers pointed out, within the school board set were: presence of undisciplined students who disrupt teaching work (66%); high number of students in a classroom (62,2%) and; scarcity of basic material resources (61,1%). These results draw attention, when compared to the study made by Alencar and Fleith (2010), where the same factors obtained respectively 21,9%, 40,2% and 29,0% of the answers.

According to the students perspective, one of the inhibitors to promoting adequate conditions to creativity development and expression in higher education is found in the professors themselves. Situation that, according to 58% of the answers, happens due to the low enthusiasm demonstrated by professors when performing their activities. However, when the same factor was observed in the previous study, it was noticed that only 3,3% professors admitted the occurrence of this factor, corroborating Stein (1989) stand that it is not enough for the individual to believe that he or she performs creative processes, it is necessary that these processes may be perceived by other individuals as well.

Concerning the results related to the pedagogic coordination group, it was highlighted that, for 58% of the students, the low incentive from the pedagogic coordination to propose other teaching practices. This result was also higher than the results obtained by Alencar and Fleith

(2010), where this factor received only 24% from the answers total. Besides, the factor preferences for traditional teaching methods by the professors, on the same study, reached only 8,6% of professors answers, while the students indicated an answering percentage of 48,7%. Situations that seem to demonstrate the need for the development of a more creativity favorable environment in the HEI, as evidentiated by Alencar and Mitjáns Martínez (1998), regarding the need for a more creativity favorable environment which in turn needs creative leaders who would be responsible for creating this creative environment by supporting the new proposed ideas.

Table 2: Inhibiting factors in promoting adequate conditions to creativity development and expression in higher education

Inhibiting Factors	Freq.	Perc.
Presence of undisciplined students who disrupt teaching work	175	66,0
High number of students in the classroom	163	62,2
Scarcity of material resources	160	61,1
Professors insufficient skills to deal with undisciplined students	159	60,7
Professors lack of enthusiasm	152	58,0
Low incentive, from the pedagogic board, to propose other practices	152	58,0
Few work opportunities and practical case studies	149	54,8
Professors lacking autonomy to vary pedagogic practices in the classroom	144	53,3
Professors inability to vary pedagogic practices in the classroom	139	53,1
Subject content is little adequate to work creativity	137	52,3
Professors insecurity of teaching methods and to test new pedagogic practices	134	51,0
Professors prefer traditional teaching methods	128	48,7
Pedagogic board prefers traditional teaching methods	127	48,3
Subject extension programs must be fulfilled	117	44,5
Elevated number of subjects and other activities	116	44,3

Source: Research data; adapted from Alencar and Fleith (2010).

On Table 3, the frequency and percentage of students from both genders concerning different inhibiting factors are presented. It was observed a significantly divergent percentage amongst the feminine gender students, when compared to the masculine gender, for the following inhibiting factor, respectively: presence of undisciplined students who disrupt teaching work (76,4% and 58,2%); low incentive, from the pedagogic board to propose other practices (64,0% and 52,5%); professors lacking autonomy to perform teaching activities (63,6% and 46,8%) and; professors insufficient skills to deal with undisciplined students in the classroom (67,8% e 54,6%).

From what was exposed, the frequency of answers of the inhibiting factors pointed out show that the feminine gender students present a great concern regarding learning environment adequacy to creativity promotion. Which corroborates the observations made by Alencar and Fleith (2010), that the way teaching is conducted in this environment can represent an inhibiting factor to creativity promotion. According to Moreira (2007), the learning environment is socially constructed by interactions established between students, professors and other material and symbolic sources from the environment.

Table 3: Inhibiting factors to promoting adequate conditions to creativity expression and development according to genders.

Inhibiting Factors	Masculine N= 141 Freq	Perc.	Feminine N=121 Freq.	Perc.
Scarcity of material resources	83	58,5	78	64,0
Presence of undisciplined students who disrupt teaching work	82	58,2	93	76,4
High number of students in the classroom	82	58,2	83	68,6
Few work opportunities and practical case studies	82	58,2	67	55,4
Professors lack of enthusiasm	79	56,0	73	60,3
Professors insufficient skills to deal with undisciplined students	77	54,6	82	67,8
Low incentive, from pedagogic board, to propose other practices	74	52,5	78	64,0
Professors inability to vary pedagogic practices in the classroom	69	48,9	70	57,4
Subject content is little adequate to work creativity	68	48,2	69	56,6
Professors lacking autonomy to vary pedagogic practices	66	46,8	77	63,6
Professors insecurity of teaching methods and to test new pedagogic practices	63	44,7	70	57,9
Professors prefer traditional teaching methods	62	44,0	65	53,7
Pedagogic board prefers traditional teaching methods	60	42,6	67	55,0
High number of students in the classroom	58	41,1	58	47,9
Subject extension programs must be fulfilled	57	40,4	59	48,8

Source: Research data; adapted from Alencar and Fleith (2010).

On Table 4 the barriers indicated by the students, comparing the higher education institutions researched (public and private) are presented. Contrary to the results identified in the study developed by Alencar and Fleith (2010), no significant difference between both kinds of institution was observed in the occurrence of inhibiting factors. The three main inhibiting factors pointed out by the students in Higher Education Institutions were: scarcity of material resources, high number of students in the classroom and the presence of undisciplined students who disrupt teaching work.

Table 4: Inhibiting factors to promoting adequate conditions to creativity development and expression according to students from public and private HEI.

Inhibiting Factors	Public N= 93		Private N=169	
	Freq.	Perc.	Freq.	Perc.
Presence of undisciplined students who disrupt teaching work	63	67,7	112	66,3
High number of students in the classroom	58	62,4	105	62,1
Professors inability to deal with undisciplined students	58	62,4	101	59,8
Scarcity of material resources	57	61,3	103	60,9
Professors lack of enthusiasm	55	58,6	97	57,4
Low incentive, from pedagogic board, to propose other practices	54	58,1	98	58,0
Few work opportunities and practical case studies	53	56,5	96	56,8
Professors lacking autonomy to vary pedagogic practices	52	55,4	92	54,4
Subject content is little adequate to work creativity	50	53,2	87	51,5
Professors inability to vary pedagogic practices in the classroom	50	53,2	89	52,7
Professors insecurity of teaching methods and to test new pedagogic practices	48	51,6	86	50,9
Pedagogic board prefers traditional teaching methods	46	48,9	81	47,9
Professors prefer traditional teaching methods	46	48,9	82	43,2
High number of students in the classroom	43	45,7	73	43,2
Subject extension programs must be fulfilled	42	45,2	75	44,4

Source: Research data; adapted from Alencar and Fleith (2010).

FINAL REMARKS

The data related to the inhibiting factors aggregated in three groups: higher education institution board, pedagogic coordination and teaching staff; showed that the business management students consider these groups, in a certain way, as equivalents. Only a slight preponderance of the inhibiting aggregated factor referring to the higher education institution board.

Opposing to what was observed in the research developed by Alencar and Fleith (2010), on which four of the biggest barriers pointed out by professors, three were referring to students, but here when researching the students perspective, amongst the four inhibiting factors pointed out by the students, three referred to the higher education institution. Which were: the high number of students in the classroom, scarcity of basic material resources, the presence of undisciplined students who disrupt teaching work, and the fourth inhibitor, according to the students, was pointed out as the professors lack of enthusiasm.

It is highlighted that the factor related to the high number of students in the classroom, was pointed out by both the students participating in this study as well as by the professors who participated in the research developed by Alencar and Fleith (2010). This factor may be one of the factors that directly meets the impediment of creativity development in higher education. Considering that once the elevated number of students in the classroom hinders the adoption of new teaching practices by the professor, favoring then, the maintenance of traditional teaching practices. Or may even function as an enthusiasm reductor for professors.

Another divergence related to the results obtained in previous researches made concerning professors view regarding inhibiting factors to promote adequate conditions to creativity promotion and expression in higher education, is the existing balance in the occurrence of the inhibiting factors, pointed out by students from either private or public higher education institutions.

The results obtained in this study point out towards the need for higher education institutions to promote the existence of a learning environment more favorable to creativity promotion and expression, considering the three aggregated groups, when establishing conditions where creativity is part of the institution daily reality, as presented by Alencar and Mitjáns Martínez (1998). Obtaining thus, the passage from teaching-based docency, where the teacher is the owner and transmitter of knowledges and the student is a mere passive being who only memorizes what is taught, to a creativity and learning based teaching, where professors and students create possibilities to assimilate knowledge, aiming to develop skills and competencies. In compliance to the recommendations made by Abreu and Masseto (1990), Pimenta e Anastasiou (2002), Anastasiou and Alves (2003), Zabalza (2004) and Barreto (2007).

The analysis present in this study aimed to contribute to widen the acknowledgement about the occurrence of creativity in higher education, especially, to broaden the knowledge of the conditions of creativity development in the Business Administration courses. It was considered as a limitation factor in this study the participation of only three higher education institutions. It is proposed as a suggestion for future researches, the development of a wider quantitative study, using the same theme as the one used for the development of the present study. As well as, the development of studies concerning the use of information and communication technologies by college students, considering the different inhibiting factors presented on this and other studies, concerning creativity promotion and expression in higher education.

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