

# Academic Society of Dentistry: a literature review

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Received March 16, 2018. Approved January 07, 2019.

## ABSTRACT

The Academic Society is defined as an extracurricular activity coordinated by students with mentoring and teacher participation, as well as the participation of researchers and health professionals. The members seek to contribute with their experiences, to explore and improve the student's knowledge about certain subjects. The current study aims to investigate the literature and understanding of the importance and contribution of Academic Societies for the development of dentistry pupils. The following key words were utilized as a search strategy: education, health education, extracurricular activities, academic societies and dentistry. The research was conducted in English, Portuguese and Spanish. The databases utilized were PubMed, Google Scholar, MEDLINE, LILACS and SciELO. A total of 3,552 published articles were found from 2000 to 2017. After applying the defined criteria, only thirty documents were selected and analyzed entirely. The results were arranged into the following four areas: Health, Dentistry, Extracurricular Activities and improvement of the academic curriculum. Based on the research, it was concluded that in spite of the extensive number of articles found, few addressed the topic of the Academic Society. The specific articles emphasized that Academic Societies are beneficial to their participants by improving self-learning, leadership, student relationships and the mutual exchange of knowledge between their participants and the public.

**Descriptors:** Education. Health Education. Dentistry.

## 1 INTRODUCTION

The idea of an academic society is not something new. During the 1920's the first Academic Society (AS) was created and named

the Academic Society for Combating Syphilis, at the Ribeirão Preto Medical School-USP<sup>1,2</sup>. Over the years, other similar initiatives have emerged in medical schools in Brazil, such as

the Luiz Marino Bechelli Society of Leprosy, founded in 1991. During the period of the military dictatorship, the Academic Society had as their objective the questioning of higher education practices of the period which would lead to the rise of technical scientific advancements.

During the 90's, in order to remedy curricular deficiencies and promote changes, medical schools began to reform curriculums, focusing on three fundamental points: education, research and health care<sup>4</sup>.

Based on these principals, Academic Societies began to have a greater role in promoting activities with the goal of filling the existing gaps in the training of undergraduate students as well as to adapt curriculums with these new developments<sup>5,6</sup>.

The increasing use of this educational tool was supported by the National Curricular Guidelines (CND) and the resolutions of CNE / CES of 2010. These organizations recommended the accomplishment of complementary activities that contributed to the student's acquirement of knowledge independent of face-to-face or distance learning<sup>7</sup>. Therefore, the Academic Society of Family and Community Medicine based their actions on the CND for medical graduation in Primary Health Care<sup>8</sup>.

Academic Societies present advantages such as: stimulating self-learning and critical sense, preparing students for advances in scientific fields as well as early familiarization with factors that contribute to health-disease relationships. This enables pupils to understand and observe the real needs of local communities and the relationship between individuals in different stages of the profession by allowing contact between freshmen and veterans<sup>9</sup>.

The Academic Societies are made up of activities coordinated by students from different

levels, with the participation of teachers, researchers and health professionals who wish to contribute their experiences, explore and expand their knowledge<sup>10,11</sup>. The Academic Society can have different shapes, but they must present clear and well defined rules to serve as their guide.

Among the activities proposed by Academic Societies are theoretical classes, hands on experiences, symposiums and conferences. They provide research development, campaigns aimed at health care in various places and public health promotion events<sup>12,13</sup>.

Academic Societies can promote benefits for higher education and the community. In the area of health, there are reports that expose the effectiveness and contributions of the Health Education Society (HES) which provides space for discussions of health promotion, seeking to work closely with the community and understand the interactions between scientific and popular knowledge<sup>14</sup>.

Another example that emphasizes the importance of Academic Societies was published by the Academic Society of the Psychology School (LAPES), linked to the Bahia School of Medicine and Public Health with the objective of developing a space for discussions about Psychology in universities and applying the knowledge attained. This Society, semiannually selects themes, based on the framework of the University, in addition to the vast experience that the students acquire when participating in LAPES. Annual meetings are held with the theme "The Practices of the Psychologist in the School" where two professionals from the field of psychology expose their experiences in the university environment<sup>15</sup>.

Regarding Dentistry, it is possible to observe great contributions from Academic

Societies, taking into account the positive examples mentioned for graduate courses. Currently, in Brazil, the dental area is presenting vast scientific-technological advancements; however a large part of the public lack the income to pay for dental treatment, therefore, the results found are a large number of the population with oral and general health problems. Accordingly, it is necessary that undergraduates understand this social context and carefully reflect about effective strategies for this delicate scenario. These responsibilities are recommended by the Dentistry NCDs, which emphasizes the importance of training professionals with a critical, humane, and generalist profile<sup>16</sup>.

However, it is worth highlighting that the traditional curriculum of Dentistry does not always help develop this type of attitude in their undergraduates, making the Academic Societies an important resource. These societies provide students with a space that allows them to debate, and have experiences with patients and communities in their first years of the course. These extracurricular activities allow students contact with specialists and experiences with different realities, as well as furthering the university's relationship with the community<sup>17,18</sup>.

The contact between the university and its students can be found in the case report of Bahia's Oral Academic Education Society (BOAES), in which their experiences from 2011 to 2013 were described. In the report you can find 32 educational activities performed in communities in Salvador / BA, involving several age groups. The main goal of this case report was to raise awareness and encourage patients to change their attitudes towards their own health. Along with these activities, dental students provided instructions and supervised oral hygiene activities. These actions were not

limited to the capital, BOAES also made trips to small cities to promote oral health in other communities, as well as permanently contributing with educational work related to oral health in the Family Integration Center (FIC- a philanthropic civil institution founded in the 90's)<sup>16</sup>.

Considering the relevant role of the Academic Society as an educational tool and scientific resource, the objective of the present review was to search available literature and focus on the importance of the contributions of Academic Societies in the training of undergraduate students in the area of Dentistry by providing a guide to develop these activities in educational institutions.

## 2 METHODOLOGY

The search strategy combined the following key words "Education", "Health Education", "Extracurricular Activities", "Academic Societies" and "Dentistry" in English, Portuguese and Spanish.

The data was collected from PubMed, Google Scholar, MEDLINE, LILACS and SciELO databases. The inclusion criteria used was: access to full texts published between 2000 and 2017, as well as descriptions of experiences and / or educational reports in professional training in the health area. Articles that did not refer to the health field or did not mention at least two of the key words were excluded.

In order to better develop the subject in the topic discussion, the articles were divided into the following themes: 1) Health: to identify the experience reports in different health areas that use this tool; 2) Dentistry: to highlight the works of literature developed in the area of Dentistry; 3) Extracurricular activities: attempt to establish differences and similarities between the following terms: extracurricular activities and Academic Societies; and 4) Impact in graduation courses: a

description of the pedagogical aspects of the activities and its impacts on the academic formation of health students.

### 3 RESULTS

The results obtained through the collection of data in the information banks were provided in figures 1 to 3. All keywords were combined in English in these databases: MEDLINE, PubMed and SciELO. However, in the LILACS and Google Scholar databases the same terms were used in the Portuguese language, since the insertion of the terms in English did not generate results. The results of the items found were added together as a single syntax of terms.

A total of 3,552 scientific articles were found, and 30 documents were utilized after the application of the inclusion and exclusion criteria, which were summarized into 4 themes

(table 1).

### 4 DISCUSSION

Academic Societies are not common in the academic field, although there are reports of their origin around the twentieth century<sup>12</sup>. However, its use has grown exponentially in recent years, demonstrating a growing interest, with significant advancement in scientific contributions addressing this issue and making it essential to continually search its effectiveness, influence and to understand how Academic Societies are established<sup>20</sup>.

Academic Societies should be a space for mutual knowledge exchange and for contributing to the community<sup>21,22</sup>. The Society generally develops their foundations based on the principle of the universities' triad: education, research and extension, but these three items are not always explored.

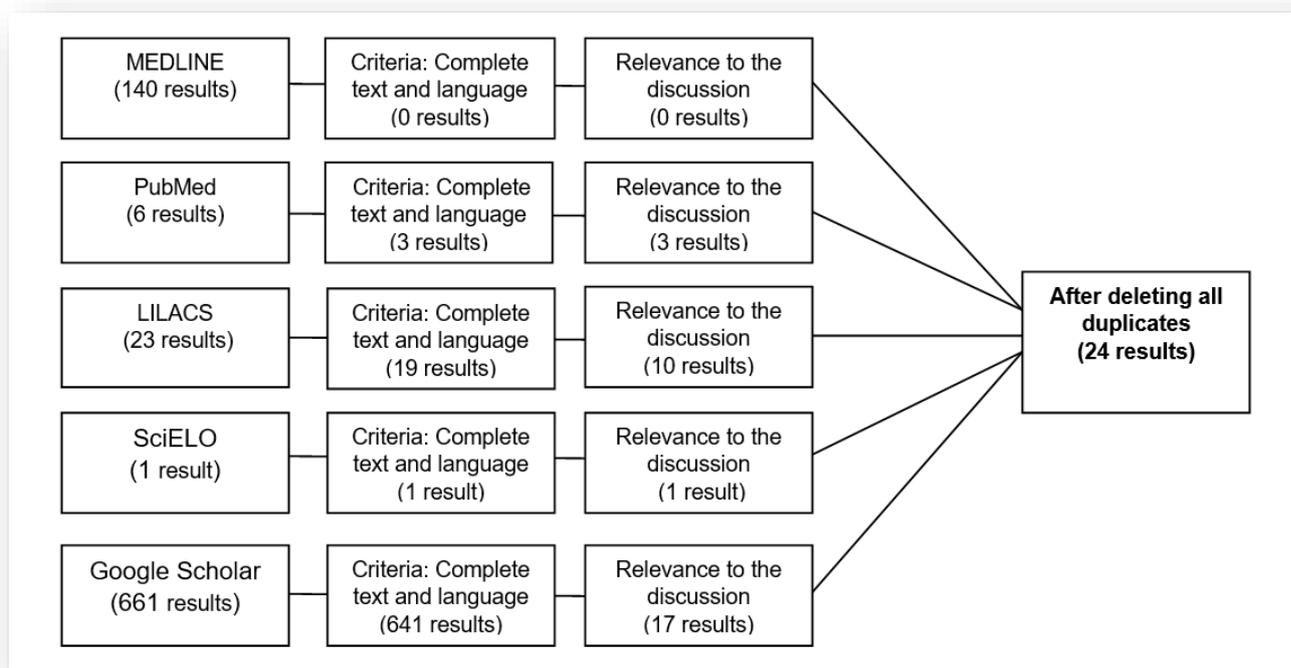


Figure 1. Flowchart of bibliographical research for aggregation of terms *student societies AND education*

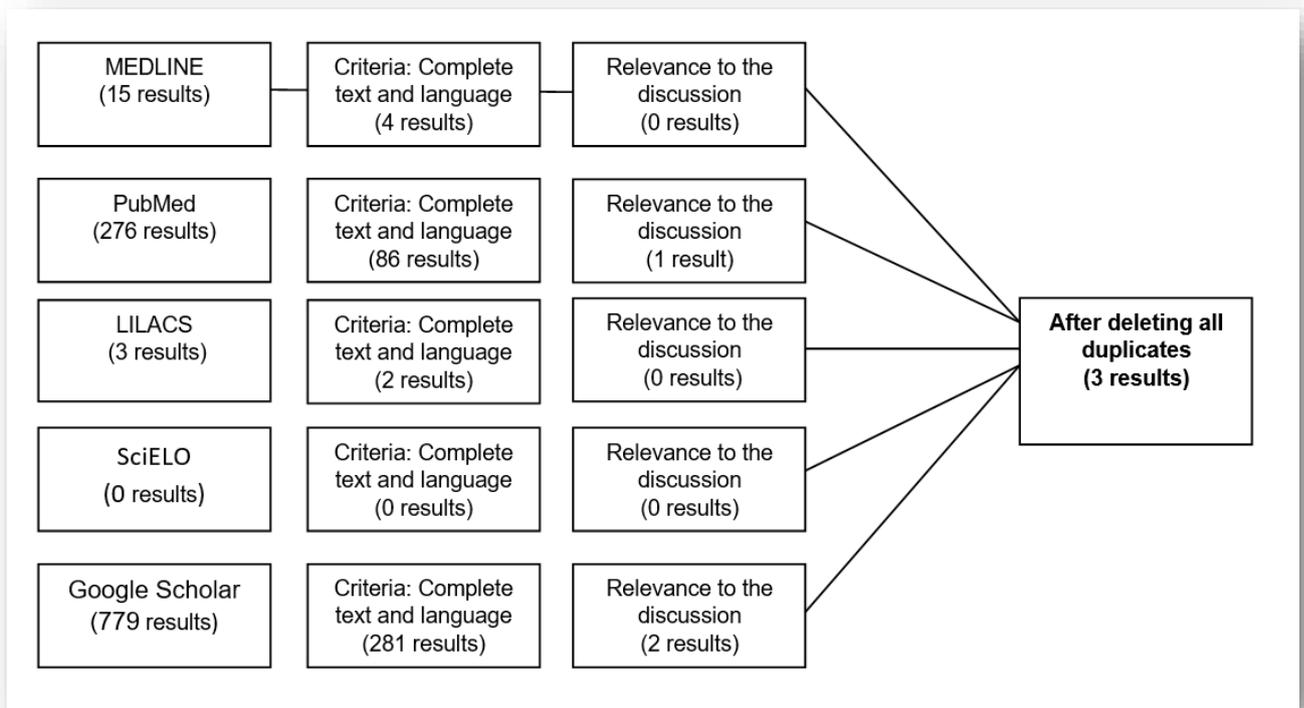


Figure 2. Flowchart of bibliographical research for aggregation of the terms *health education, student league AND dentistry OR extracurricular activities*

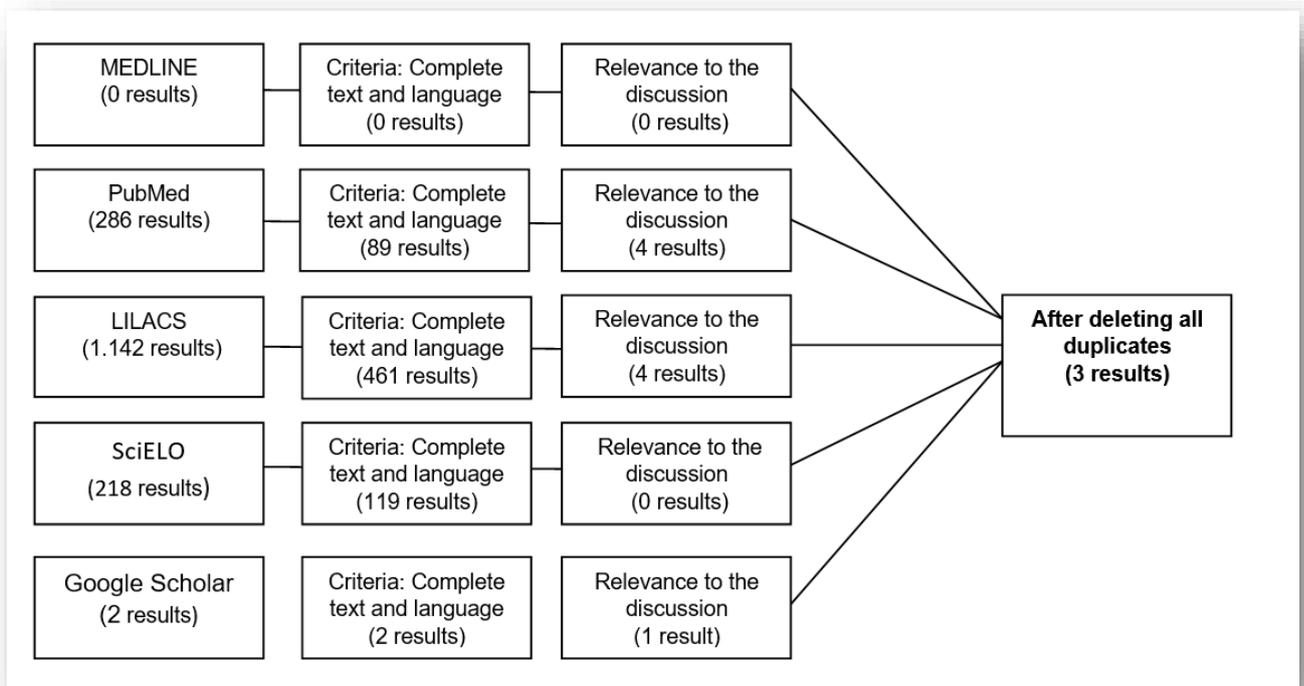


Figure 3. Flowchart of bibliographical research for aggregation of the terms *education AND student leagues OR extracurricular activities*

Table 1. Systematization of the articles according to their themes

Themes	Study	Characteristic	Conclusion
<b>Health</b>	Magalhães (2015) <sup>23</sup> Queiroz (2014) <sup>30</sup> Floss (2014) <sup>17</sup> Gonçalves (2009) <sup>18</sup> Silva (2009) <sup>24</sup>	Discussion about the composition, importance and influence of Academic Societies as a training tool for the undergraduate students in their respective areas.	The Academic Society begun in a Medical course, in the twenties and have been utilized in other areas of health as a pedagogical tool. Today, there are reports about Academic Societies in psychology, nursing, dentistry and other health disciplines as well as, in multidisciplinary areas.
<b>Dentistry</b>	Costa (2015) <sup>16</sup>	The author emphasizes the importance of the Academic Society in health promotion and describes their experiences through the Baiana Academic Society of Oral Health Education.	Despite the lack of dental literature, the importance of Academic Societies are observed in the formation of dental students.
<b>Extracurricular activity</b>	Dantas (2017) <sup>5</sup> Bastos (2012) <sup>9</sup> Torres (2008) <sup>26</sup> Bonin (2011) <sup>8</sup> Andreola (2016) <sup>10</sup> Goergen (2017) <sup>14</sup>	The authors discuss some characteristics of Academic Societies, as well as highlight the importance of teamwork and how it affects the student's educational formation. Additionally, they discuss regulations of the Academic Societies and the social activities performed by undergraduates in the community.	Academic Societies present characteristics that allow the academic community to affirm that they are extracurricular activities. An example is the fact that Academic Societies take place in extracurricular hours providing student experiences beyond those recommended in formal curriculums.
<b>Impact in the academic formation</b>	Pêgo-Fernandes (2011) <sup>26</sup> Hamamoto Filho (2011) <sup>29</sup> Hamamoto Filho (2010) <sup>28</sup> Silva (2015) <sup>4</sup> Monteiro (2008) <sup>15</sup> Fernandes (2010) <sup>1</sup> Imakuma (2013) <sup>13</sup> Soares (2017) <sup>27</sup> Simões (2014) <sup>22</sup> Ramalho (2012) <sup>11</sup> Silva (2015) <sup>4</sup>	Authors argue about experience reports and pedagogical resources from Academic Societies, and discuss what this extracurricular activities could offer students by indicating positive or negative aspects of the Society. They also debate possibilities that lead students to wish to participate in these activities.	Within the literature of specific Academic Societies, themes are widely discussed, demonstrating the interest in understanding how the Academic Societies contribute to the formation of students by measuring the level of knowledge and scientific production achieved by participants.

It is considered, when students and professors comprehend the theme that this tool can be formed in different formats. There are societies formed by students from a single

course, and there are also multidisciplinary societies. Therefore, we can conclude that there are no standards for their formation, but it is known that they are always developed by

students and usually along with a teacher as an advisor.

The Academic Societies are different based on their objectives, and defined as needed by student(s) involved in their development. Some academic organizations prioritize to fulfill any shortcomings in their curriculum, such as the Academic Society of Oncology and Complementary and Integrative Medicine (formerly known as the Society of Alternative Medicine) of the State University of Rio de Janeiro (UERJ), in which the authors exhibited the need for an Academic Society instead of waiting for an administrative curriculum change<sup>17</sup>.

There are also societies that go beyond the classroom, addressing practical activities in laboratories and social activities, such as the case of the Baiana Academic Society of Oral Health Education<sup>16</sup>.

For undergraduates, Academic Societies allow for early contact with patients, clinical experience, and knowledge exchange through their relationship with professors, professionals and veterans. For an undergraduate this interaction is desirable because it provides them training experience<sup>23,24</sup>.

In addition to the academic benefit to students, Academic Societies provide positive impacts to communities that benefit from their activities. Often, these Societies operate in places where there are no services performed by public entities<sup>25</sup>.

The positive aspects of the Societies are prominent, however, there are authors who mention negative aspects such as an overload of curricular activities which may cause premature specializations<sup>13,21,24</sup>.

When examining the literature researched, we observe, in the health area, that the great majority of authors present Academic Societies as an important instrument during

undergraduate training, indicating a growing use of this tool in different areas, although in the area of Dentistry, specifically, there are still few scientific reports available<sup>11,14-16,22</sup>.

From a pedagogical approach, the impact on the academic formation is noted in the understanding of how Academic Societies contribute to the formation of students as well as the assessment of their level of knowledge and increase in scientific reporting. We can also find that its characteristics can be compared to an extracurricular activity, allowing students experiences beyond those of the formal curriculum<sup>1,4,5,9,10,13,18,26,27</sup>.

Even with all the potential and positive impacts with educational formation, Academic Societies also depend on an administrative and academic organization for rules and objectives. This can be reaffirmed by the experience of Botucatu Medical School - Unesp, which in 2015 developed the Council of Academic Societies, linking the Academic Centers in order to establish standards for the creation of new Academic Societies in different universities.

This is relevant for planning parameters and operating the Societies, in order to contribute to medical training<sup>28,29</sup>. In addition to this report, in 2006, the Brazilian Medical Association of Academic Societies was created during the 8th Brazilian Clinical Medical Conference, with the collaboration of several medical entities<sup>30</sup>.

## 5 CONCLUSION

It is concluded that Academic Societies, when well guided and organized, are beneficial for undergraduates. They are in fact non-compulsory extracurricular activities and can contribute positively to the academic environment and still have social relevance. The student of Dentistry that seeks to develop and form an Academic Society can enhance their

formation, both professionally and personally. Academic Societies are useful pedagogical tools in shaping their professional future; however, it is necessary to have clear and well-defined rules to fully fulfill their role.

## RESUMO

### **Ligas acadêmicas de Odontologia: uma revisão de literatura**

Ligas acadêmicas são definidas como atividades extracurriculares coordenadas por estudantes com a tutoria e participação de docentes, tendo também a participação de pesquisadores e profissionais de saúde. Os integrantes almejam contribuir com suas experiências, explorar e aprofundar o conhecimento sobre um determinado tema. O presente estudo tem por objetivo buscar na literatura subsídios para delinear a importância e contribuição das ligas acadêmicas para a formação dos discentes em Odontologia. Na estratégia de busca foram utilizados os descritores “Educação”; “Educação em saúde”; “Atividade extracurricular”; “Ligas Acadêmicas”; e “Odontologia”, nos idiomas inglês, português e espanhol, nas bases de dados PubMed, Google Scholar, MEDLINE, LILACS e SciELO. Foram encontrados 3.552 artigos científicos publicados de 2000 a 2017. Após a aplicação dos critérios de inclusão e exclusão foram selecionados 30 documentos, os quais foram consultados integralmente. Os resultados encontrados foram sistematizados em 4 eixos temáticos: Saúde, Odontologia, Atividade extracurricular e Impacto na Formação Acadêmica. Com base na literatura consultada, conclui-se que apesar da quantidade expressiva de artigos encontrados, poucos abordam especificamente o tema Liga Acadêmica. Os artigos específicos ressaltam que as ligas acadêmicas são benéficas para seus participantes, aperfeiçoando a prática de autoaprendizado, liderança, inter-relação, empatia e a troca mútua de conhecimento entre seus participantes e sociedade.

**Descritores:** Educação. Educação em Saúde. Odontologia.

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