

Academic dishonesty: effects on the ethics education of health professionals

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Abstract

Given the current high level of technology, it is necessary to continually discuss and review the topic of ethics in the academic environment. Technological tools did not recreate the ethical standard, but began to offer students alternatives, facilitating practices such as cheating, plagiarism, and falsification, which have made the challenges for educational institutions even more complex. This article shows the damage and losses that academic dishonesty may pose to society, as it reflects on the ethical standards of future professionals. The authors sought to characterize the main types of academic dishonesty, present examples of how some unethical practices have been openly tolerated and how some medical schools approach this subject in their curriculum matrices, compare how the issue is dealt with in other cultures, and finally, present some general recommendations on changes that can contribute to improving the ethical and moral standards in academic relations.

Keywords: Scientific misconduct. Plagiarism. Copyright. Ethics. Fraud. Education, higher.

Resumo

Desonestidade acadêmica: reflexos na formação ética dos profissionais de saúde

Em vista do elevado grau tecnológico da atualidade, precisa-se continuamente discutir e revisar a temática da ética no ambiente acadêmico. As ferramentas tecnológicas não recriaram o padrão ético, mas passaram a oferecer alternativas aos alunos, facilitando práticas como “cola”, plágio e falsificações, o que tornou ainda mais complexo o desafio da instituição de ensino. Este artigo aponta os prejuízos que a desonestidade acadêmica pode representar para a sociedade, na medida em que refletem no padrão ético dos futuros profissionais. Buscou-se caracterizar os principais tipos de desonestidade acadêmica, indicar exemplos de como algumas práticas são toleradas de forma aberta e de como algumas escolas médicas trabalham o tema em suas matrizes curriculares, comparar como outras culturas tratam essa questão, e, por fim, apresentam-se algumas recomendações gerais acerca de mudanças que possam contribuir para a melhoria do padrão ético e moral nas relações acadêmicas.

Palavras-chave: Má conduta científica. Plágio. Direitos autorais. Ética. Fraude. Educação superior.

Resumen

Deshonestidad académica: efectos sobre la formación ética de los profesionales de la salud

Dado el alto nivel actual de la tecnología, es necesario discutir y revisar constantemente el tema de la ética en el ámbito académico. Las herramientas tecnológicas no reformularon el estándar ético, pero ofrecen alternativas a los estudiantes, y facilitan prácticas como hacer trampa, plagio y falsificaciones, lo cual tornó el desafío de la intuición de enseñanza aún más complejo. Este artículo científico analiza los daños que la deshonestidad académica puede representar a la sociedad, en la medida en que repercuten en el estándar ético de los futuros profesionales. Se procuró caracterizar los principales tipos de deshonestidad académica, presentar ejemplos de cómo se han tolerado abiertamente algunas de estas prácticas y cómo algunas facultades médicas abordan el tema en sus matrices curriculares; comparar cómo se trata el tema en otras culturas y, finalmente, se presentan algunas recomendaciones generales sobre los cambios que pueden contribuir a la mejora de las normas éticas y morales en las relaciones académicas.

Palabras clave: Mala conducta científica. Plagio. Derechos de autor. Ética. Fraude. Educación superior.

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Declararam não haver conflitos de interesse.

When we delve deeper into the study of bioethics, sometimes we encounter words that can have many meanings that are imprecise, semantically speaking, such as the words “morals” and “ethics”. According to Beauchamp and Childress¹, these words should not be restricted merely to theoretical contexts. “Ethical theory” and “moral philosophy” are the appropriate terms when we emphasize philosophical thought concerning the nature and the very basis of morality. The purpose of a theory is always to increase clarity, reveal the framework and expand the precision of our reflections regarding what is morality. Guided by this line of thought, Beauchamp and Childress included, in “Princípios de ética biomédica” (“Principles of Biomedical Ethics”), a chapter that addresses common morality, which is viewed as universal morality, which would include, amongst other general rules, norms such as “to not lie”, “to not steal other people’s belongings” and “to respect the rights of others”.

If “to not lie” and “to not deceive” are moral principles - based on the concept of bioethics as a systematic study of human behavior within the realm of the life and health sciences, evaluated from the perspective of moral values and principles² – academic dishonesty, as exemplified by “cheating” and plagiarism, regarding how these practices relate to forms of deceit, is a subject that relates perfectly to the concept, especially as it relates to evaluative processes within the fields of the life and health sciences³.

One of the great challenges that is currently being faced by the Brazilian educational system is the fostering of a culture of ethical behavior amongst academics. This challenge, which, at its core is far from new, harks back to the origins of education at its different levels, during different eras and geographical settings. A new factor in this context is state-of-the-art technology, which has provided methods of communication that are increasingly efficient and have exacerbated the complexity of the challenge of dealing with ethical behavior. In a world that boasts innumerable digital modes of communication, the practice of “cheating” and plagiarism, for example, has been broadened and become more sophisticated due to the emergence of devices that, although more intricate, have become trivialized within certain academic contexts and environments.

Both Brazilian and international institutes, such as the Conselho Nacional de Desenvolvimento Científico e Tecnológico (National Council for Scientific and Technological Development) (CNPq), the Fundação de Amparo à Pesquisa do Estado de São Paulo (Fapesp) (Foundation for the Support of

Research of the State of São Paulo), the European Federation of National Academies of Sciences and Humanities (ALLEA) and the European Research Foundation, have published studies that define principles that promote integrity within academic and research procedures. In general, these principles highlight the integrity of research as an absolute quality with respect to researchers and the institutions that they represent, including: (i) honesty in the execution of studies and in the presentation of results; (ii) reliability in the execution and in the presentation of conclusions; (iii) objectivity in the collection and treatment of data and in the presentation of evidence; (iv) impartiality in the execution of the research; (v) the proper treatment of research participants and of the equipment used to conduct the research; and (vii) honesty in citing sources when using material that was produced by third parties, among others.

The promotion of a culture in which ethical behavior is prevalent depends on a set of factors. None of these, on its own, has the power to change or to create a desired culture or environment. In the United States, for example, the Association to Advance Collegiate Schools of Business (AACSB) requires that their member schools include, in their curricula, a course that is expressly dedicated to the ethical development of students during their academic lives⁴. However, according to Johns and Strand⁵, the teaching of ethics as an isolated course does not necessarily mean that those students will become professionals that abide by a code of ethics.

Studies conducted in finance and business schools revealed that academic dishonesty within these environments is equal to that within schools of other academic fields, where individuals that accept dishonesty within academic spheres are more inclined to do the same in their professional and business lives^{6,7}. It has been recognized, therefore, that one of the most entrenched problems regarding academic dishonesty is that it does not stop in school; it is transferred to subsequent stages of the individual’s life, setting forth significant repercussions within social equilibrium and justice.

Society’s concern with ethics is valid in any professional field. This is particularly significant with respect to the field of health care, in which human lives are subject to medical evaluations and decisions. The Ministry of Education, under the auspices of CNE/CES Resolution 4/2001, instituted the national curricular provisions for undergraduate medical schools, which serve as the foundation for

the curricula of all the universities in the country. In article three of that document, the resolution states that *the Undergraduate Course in Medicine should aim to develop medical professionals that are holistic, humanistic, skeptical and thoughtful, who are qualified to practice medicine and act in accordance with ethical principles*⁸.

The Código de Ética Médica (CEM) (Code of Medical Ethics)⁹, which was approved by the Conselho Federal de Medicina (Federal Council of Medicine) sets forth the code of ethics that should be followed by doctors who practice medicine. In addition, to ensure that the medical professional performs his practice ethically, it is essential that his entire academic career be undertaken in an environment that fosters these principles. Such principles should not only be an integral part of the institution's regulations, but also a part of the medical student's daily routine in classrooms and outpatient facilities.

As such, this paper aims to examine the subject of ethics and its relationship to the issue of academic dishonesty and the manner in which it manifests itself within the careers of medical professionals. Ethics, within the broader realm of academia, is a subject matter that is too vast to discuss completely within just one paper, which is why it was decided to restrict the issue to how it manifests itself within Brazilian culture, focusing on medical university courses. Ethical conduct encompasses a large diversity of behaviors and attitudes that is difficult to address satisfactorily in one single paper, which is also why the authors decided to emphasize "cheating" and plagiarism specifically, in recognition of the fact that the issue of ethics vastly transcends these two aspects of the issue.

As a result, the overall objective of this paper is to establish arguments that identify the damage that academic dishonesty can create for society, as it is reflected in the ethical standards of the medical professionals that graduate from academic environments that tolerate dishonest behavior. In addition, this paper also aims to contribute to the characterization of different types of academic dishonesty, identifying examples of how certain behaviors are openly tolerated and how some medical schools address the subject within their curricula. Comparisons are then drawn with how other cultures deal with the issue and, finally, material that has been compiled is presented that could serve as a conceptual basis for the ongoing debate on the subject, inside and outside of the classroom, in order to promote the development of students, professors and administrators that are active in the field

of academic development and in the promotion of civic values.

Most common forms of academic dishonesty

It is impossible to precisely establish how many forms of deceit can be performed in an academic environment, but the following list summarizes 13 of the main forms of this type of behavior, not necessarily in order of importance:

- "Cheating", or actively making use of a cheat sheet: this is the unauthorized use, or attempted use, of academic materials or aid from third parties in exams. In general, cheating occurs when a student reads the answers off the test of a classmate, makes use of written material, obtains answers before taking the exam, or makes unauthorized use of equipment that contains digital messages, such as watches, receivers and cellular telephones, among other methods.
- "Cheating" in a passive sense: this is the facilitation of active "cheating" by classmates, or acting in complicity or in such a way so as to facilitate the dishonesty of third parties. This may include the provision of a written assignment so that it may be copied, or the giving of permission for a classmate to have access to the answers to a written exam, and so forth.
- Plagiarism: the use of concepts, figures or texts of another author without citing sources properly, making it look as though the plagiarizer was the author of the original idea or text. Plagiarism is more than simply incorporating a word for word exact copy into one's own work; it also includes texts that are reproduced after making superficial changes to them that are sufficient only to disguise the plagiarized text from the original. According to Silva¹⁰, three forms of plagiarism exist: 1) complete plagiarism: when one performs a literal transcription of an entire text without citing the source; 2) partial plagiarism: when one copies certain phrases or paragraphs from different sources; and 3) conceptual plagiarism: when one adopts one or more concepts, or theories, as his own and presents them as though he were the author.
- The adulteration or the creation of data: examples include the falsification of data for an experiment or for a classroom report, or even the manipulation of the magnitude or unjustified removal of information, to doctor results.

- Multiple submissions: this is the use of the same paper that has already been submitted by the student previously that has incorporated superficial changes without the authorization of the student's professor or of the institution he or she represents.
- Deceit and adulteration: this refers to alterations made to an academic paper that have been made in bad faith, or that can include the forging of signatures, the attempted copying of forms of handwriting to simulate third parties, the forging of recommendation letters or of credentials in general.
- The forging of participation in a group: this refers to an individual who takes advantage of including his name in group work without effectively participating in its completion. Those that allow the inclusion of such students that do not contribute are also at fault, for motives of "collegiality". In truth, this type of mindset implies complicity and provides positive reinforcement to a negative form of behavior, thereby breaching the ethical precept of merit.
- Segmented group work: in the cases of group work, the professor expects that each participant should have an understanding of the totality of the work being conducted. However, in situations where individual tasks are attributed to each participant so that, at the end, each task is joined in forming the entire study, it is common for a student to submit his part, while not having a complete grasp of the study. In such cases, a distortion of the purpose of the task arises.
- Dishonesty in the form of unauthorized computer access: this refers to the unauthorized use of *e-mail* accounts and restricted systems in order to gain an unfair advantage or third party information.
- Dissimulation: this refers to cases in which a student, upon perceiving a professor commits an error from which he can take advantage, such as the summation or granting of a higher grade or attribution of any undue advantage, pretends to not be cognizant of the error in order to benefit from it.
- Lying and manipulation: this refers to the use of false information, which generally includes a certain emotional investment, to coerce the professor into altering test dates or to concede some undue benefit. Examples of such behavior include the use of false doctor's notes and the citing of nonexistent family problems, and so forth.
- Double standards: this refers to cases in which

the student invokes the use of a certain rule that was implemented by the professor in a certain context that is convenient for the student, but casuistically refuses to apply the same rule to a different context in which it would be unfavorable to him.

- The selfish use of public academic material: this refers to the use of public academic material as though it were private, or even the practice of damaging such material as though it were the student's own. This is a common practice among dishonest users of libraries, exemplified by the hiding of limited edition books in out-of-the-way places where they more than likely will not be found by library goers. This allows the dishonest student to have exclusive access to that book whenever he wants, even though this is in detriment to collective interests.

The previous section does not aim to be an exhaustive list of every form of dishonest academic behavior; the purpose was to merely illustrate situations that are typical of the classroom environment. Among the most common types of academic dishonesty, plagiarism and "cheating" are discussed in more detail below.

Plagiarism and "cheating"

There is no one single concept regarding plagiarism and "cheating" that encompasses the entire range of variation of these themes within the ethical, pedagogical, legal and institutional spheres. It becomes necessary, therefore, to distinguish between the terms in order to understand them better. Fapesp, for example, defines plagiarism, within a scientific context, as the *appropriation for oneself of ideas or verbal, oral or written formulations of others without clearly citing the source, in order to reasonably generate the perception that those ideas or formulations were authored by the plagiarizer*¹¹.

The relative significance of plagiarism in other cultures

In some cultures, plagiarism is treated very severely, as exemplified by the many renowned public figures who either had their credentials revoked or had to resign their positions. A case that was covered in detail by the press occurred in March of 2011, when Germany's Minister of Defense, Karl-Theodor zu Guttenberg, resigned his position as the result of a case in which he was accused of allegedly committing plagiarism in his doctoral thesis in law at the

University of Bayreuth¹². The minister came forth to offer an apology due to the gravity of his mistake and requested the revocation of his academic title. Even though the performance of his public duties did not relate directly to his doctoral thesis, the issue generated sufficient heated public debate to erode the minister's credibility, culminating in his resignation.

Also in Germany, in 2011, the Minister of Education, Annette Schavan, resigned her position after the University of Heinrich Heine, in Dusseldorf, revoked her doctorate because she was accused of committing plagiarism. After several accusations were submitted, the university confirmed that she systematically plagiarized segments of her thesis, and, although the fact occurred in 1980, the evaluation board still considered the transgression to be significant even in 2011. She was the fourth public official in the country to have lost his or her title of doctor due to plagiarism.

Another emblematic case, which occurred in April of 2012, resulted in the suspension of the president of Hungary, Pál Schmitt, who also resigned his position before parliament, due to accusations of his having committed plagiarism while completing his doctoral thesis. In addition to losing public office, the University of Semmelweis, in Budapest, also revoked his title of doctor. This type of intolerance towards academic dishonesty is not exclusive to Europe. Cases in which academic titles were revoked are also common to universities in Canada and the United States, where rigorous legislation on the issue exists.

In Latin America, in the face of higher rates of corruption than European and North American countries, it would be less probable for a case of plagiarism to be sufficient to affect the political career of a public authority, revealing how the significance that is attributed to such an issue varies in accordance with geographical, temporal and cultural contexts. Within the scientific community, however, these distances tend to be reduced in light of the universalization of science, scientific journals and international agreements within the field.

In Brazil, the University of São Paulo (USP) recently dismissed a professor for having committed plagiarism in his research. The event occurred in 2011, and was the first dismissal of a professor over the last 15 years at that institution, according to a media release published by the university¹¹. At the time, a doctoral student, who was being oriented by the professor in question and participated in the study in question, also lost her right to receive a diploma. These examples provide evidence of the

existence of people and commissions within the Brazilian academic community, that are attempting to minimize the trivialization of plagiarism. Should this trend continue, perhaps someday the significance attributed to such transgressions may be equal to the levels of countries like Germany, Hungary, Canada and the United States.

The ethical, legal, pedagogical and institutional perspectives of "cheating" and plagiarism

According to Pithan and Vidal¹³, plagiarism should be considered within the realms of ethics, law, pedagogy and institutions. Within the realm of ethics, *the study of human behavior insofar as it can be referred to as good or bad*, plagiarism is an act of bad faith, which is ethically improper and is therefore viewed as reprehensible within the academic community. An unfortunate aspect, according to these authors, is that the practice of academic fraud forms an integral part of a culture of dishonesty within some institutions. Because of this, the punitive measures that are at times imposed are disapproved of by members of the student community, who view these measures as being overbearing.

Within the legal realm, the question is viewed as an issue of copyright protection, beginning with the Federal Constitution¹⁴, which states, in article 5, that *authors have the exclusive right to make use of, publish or reproduce their body of work and transfer this right to their children for the period that is allowed by law*. Copyright Law¹⁵ focuses on the rules of citation, affirming the obligation to cite not only the author but also state where the author's works were published. Which is to say, plagiarism does not arise solely from the appropriation of ideas or words that were authored by third parties; it is the act of not properly citing their work. The Penal Code¹⁶, meanwhile, classifies the violation of copyright laws as a crime. The violation of these rights may be subject to a sentence of three to 12 months' detention, or the imposition of a fine.

The idea that "cheating" is part of the learning process seems to be rooted in the academic culture of many learning environments. The cases of students boasting of their ever more elaborate methods of "cheating" are common, and the act of deceiving a professor is viewed as a triumph of one's cleverness over the state of distraction of the other. Once the exam has been completed, the student that "cheats" generally does not hide the fact from his closest classmates; on the contrary, he shares the fact with his circle of friends in the certainty that he will not suffer reproach, but will, in fact, be protected.

Another classic reversal of moral values can be observed with respect to how students that refuse to share “cheat sheets” during a test are viewed by some of their peers. The students that do not share cheat sheets are stigmatized as being “selfish”, or “lack solidarity”, which are labels that aim to discourage the honest student from preserving his integrity. Such practices are common in the elementary, high school and even university environments, occurring at times even in post-graduate institutions. Educators, therefore, are dealing with a practice that is relatively well accepted that permeates the academic environment at all its various levels.

Within the pedagogical and institutional realms, the role of school administrators and professors emerges within the continuous process of developing the character of the students. In addition to the ethical issue and the implementation of rules within the internal regulations of institutions and within the development of their legal framework, academic dishonesty should be addressed, in theory, as part of the day-to-day process of molding the characters of students as they evolve towards becoming mature adults. Apparently, the majority of academic institutions believe that their role with respect to the student is limited to what occurs during the period in which institution and student are directly linked, i.e., while the student is enrolled there. The issue is that the lessons that the student learns in the realm of morality will manifest themselves in his behavior years after he or she has graduated from that institution, and will influence the behavior of that individual in the exercise of his profession.

The trivialization of academic dishonesty, especially “cheating” and plagiarism

Brazilian culture, in certain aspects, is permissive of the trivialization of these types of behavior. Certain internet sites, for example, supply vast databases of tips concerning how to be “effective” at “cheating”, or how to alter texts so that plagiarism is not perceived so easily.

As an example, Ferreira, an internet user,¹⁷ posted on his *blog* a collection of 25 infallible tips (according to the author) for “cheating” on tests. The author betrays no sense of shame in his online activities; to the contrary, he portrays himself as a service provider to those that will make use of his tips, about which he comments, with a certain boastfulness, *here are 25 infallible tips that were developed and tested by me for you to be able to cheat on tests*. Below the post one can find a flood of positive comments that were left by the site’s

followers, praising the tips and leaving a tale of their own experience while supplementing the tips with their own methods and complementing the author. The internet user, upon posting such comments, cannot be charged for a crime under law. No legal provisions exist that could classify such acts as a “crime for inciting cheating”, or for “inciting academic dishonesty”. And perhaps it is correct that such provisions do not exist. After all, this is not an issue that will be resolved within the legislative and legal spheres of society, but in its moral sphere as institutions and society evolve in terms of their values and attitudes, thereby regulating their own behavior.

There is also the curious case of a professor at the Universidade Estadual Vale do Acaraú (Vale do Acaraú State University). This professor, who holds various post-graduate diplomas¹⁸, espouses a peculiar view of the concepts of school, “cheating” and the learning process. On his *blog*, the professor states: *I view cheating not as an act of fraud or deceit on the part of the student, but as a manifestation or a resource in terms of the student’s freedom to learn, as well as a recovery strategy for students that do not perform as well in the classroom*¹⁸. The blog also reveals that *cheating was introduced, within my educational practice, as a recovery strategy for under-achieving students, just as the sun, through osmosis, penetrates meat*. The professor goes on to present various arguments in defense of “cheating” as a pedagogical recourse of social inclusion, adding:

*We can see, within the procedure of cheating, an instrument for guaranteeing, in the verification of scholastic performance, a principal of teaching such as that which is set forth by the Federal Constitution, in section II of article 206, which enumerates, among the principles of teaching, the liberty to learn, teach, conduct research and publish thought, art and knowledge. I, therefore, view cheating as a manifestation of the student’s liberty to learn*¹⁸.

It is quite probable that such lines of argument do not represent isolated cases. When one compares the rigors of discipline of the schools of 40 years ago with those of today, one notices how many precepts, such as “liberty of expression” have been confused with concepts such as the “liberty to bend the rules” in the subversion of societal values. One only needs to take note of the graffiti that is on the walls of public schools, which, in many cases, arises from this so-called “freedom of expression”, a deeply desired freedom after years of dictatorial governments. In keeping with this line of thought in the name of inclusive policies and of freedom, there

are those that argue that the student may make use of any recourse to increase his chances of passing. And, to legitimize these practices, ethical concepts and values are undermined.

As a result, the line between right and wrong becomes blurred. In place of that line arises a gray area where, depending on the line of argument and on the supposedly noble nature of the proposal (such as social inclusion, for example), a character trait that would be considered anti-ethical in a certain context becomes acceptable as a feasible method of inclusion in a different context.

Signs of academic dishonesty in the exercise of one's profession

A study by Grime⁴, in accordance with proper methods of statistical representativeness, sought to establish a correlation between the behavior of students in an academic environment and the behavior of these students at work, based on questionnaires that evaluated the perception of the students regarding certain values. The study demonstrated that the correlation is significantly high, as was expected by the researchers and expressed in their initial hypothesis.

Within the academic environment, the study analyzed such parameters as: tricking the professor with false pretenses in order to be absent from class or from tests; not collaborating with the other participants in group work; receiving unauthorized information ("cheat sheets") before or during tests; including the name of peers that did not participate in group work; copying and pasting source material directly from the internet (plagiarism); copying classmates' work, and so forth. In the work environment, the following situations were considered: did participants adhere to the lunch break interval; did participants describe to their employer the real motive of their absences; and whether or not individual and team performance was valued during team projects. The interviewees were also asked if they would: clandestinely obtain the client list of a competitor; write a report for a co-worker; fill out a financial report with false receipts, to increase the value of a trip reimbursement; present colleagues' ideas as if they were their own; and, lastly, clock-in for an absent colleague, and so forth.

Establishing this correlation between individuals' behavior in the academic environment as opposed to the work environment, as was conducted in this study, may help to explain, for example, if

a doctor that currently has the habit of issuing false doctor's notices, for whatever reason, possibly does so as a result of his having become accustomed to an academic environment in which anti-ethical behavior was trivialized as a medical student. It was noted that, although these two contexts are distinct, the ethical standards of the academic environment tend to be reproduced within the professional environment, and is greatly reflected in the formation of values within society as a whole. This strong correlation reinforces the importance of analyzing the issue of academic dishonesty more deeply during each of the stages of an individual's development.

How some medical schools deal with the problem

The curricula of medical schools, in general, contain three or four courses that touch upon the subject of academic dishonesty; generally, however, none of these courses addresses the subject with a depth that is commensurate with the significance of the subject matter. The curricula are based on directives that are set forth by the Ministry of Education⁸. Normally, these curricula include a course that is related to scientific methodology, in which the discourse relates to students' adherence to technical writing standards as set forth by the Associação Brasileira de Normas Técnicas (ABNT) (Brazilian Association of Technical Standards). There is also a course that has the purpose of discussing the Code of Medical Ethics (CME), in which the focus is medical deontology and the rights and duties of doctors, especially as these issues relate to their patient.

There is another course that addresses medical law by examining the legal aspects that are involved in conducting oneself professionally. Lastly, there is bioethics, which focuses on debating controversial issues that involve the rights of patients with respect to their lives. As such, the subject of academic honesty, at its essence, is treated as an implicit issue, a virtue or aspect of knowledge that each student that enters the course has already brought with them from when he or she entered the school - it is not, therefore, the role of the university to discuss it explicitly.

Baber¹⁹ affirms that the school and its professors have no obligation to do for the students what their parents were unable to do. It can be argued, in a certain sense, that this statement is tantamount to repeating the mantra that "good manners are

taught in the home”, and, as such, once the home has been outgrown, the school should play no role in continuing this process. If the teacher is not a role model in this sense as well, will he or she merely be a facilitator for implementing the course curriculum? This, most certainly, would not be correct, as the development of an individual’s character is a continual process, and these individuals can be easily influenced by the successive environments that they are exposed to throughout the different stages of their lives.

Medical schools, in general, set forth internal norms of conduct that contain rules for how to deal with “cheating”, plagiarism and lying among the student body. Although academic dishonesty is a much broader subject, as was mentioned previously, “cheating” is the most recurring behavior within such academic environments, while plagiarism sometimes is not even mentioned. Although these regimes may diverge on certain aspects, they are quite similar in their conceptual bases.

The biggest difference, apparently, is not in the content of the regulations themselves, but in the practical implementation of the strictness that is set forth in the regulations and in the time and effort that each institution dedicates to effectively guide and educate their academics, leading them to internalize the ethical values that are taught at institutions of higher learning. As an example, some medical schools within the state of Minas Gerais (Unifenas²⁰; Faminas-BH²¹; FCMMG²², UFMG²³; Fepar²⁴; UFF²⁵) have stated, within their internal regulations, that the members of the student body are subject to disciplinary measures that range from verbal admonishment, to suspension and all the way to expulsion. These institutions have also determined that “cheating”, such as the unauthorized use of a cell phone during tests, in addition to situations involving plagiarism in scholastic work, is considered to be a severe transgression that can bring forth punishment, from the student receiving no credit for a test or assignment to being automatically suspended for a certain number of days.

These institutions make use of their internal regulations, however, for certain specific forms of punishment. In general, no institutional policies exist to bring this debate to the forefront, permanently, in the classroom, to encourage students to follow ethical standards and to develop an internal culture of rejecting any manifestation of academic dishonesty. Institutions, in a general sense, seem to adopt the posture suggested by Barber¹⁹, opting to not involve themselves in what is considered to be the role of the parents.

A feature that was observed in the management of many of these learning institutions is that they deal with the issue of plagiarism in a manner that is merely administrative, and some deal with the issue only within the course “Scientific Methodology”, or similar. As a result, the student is taught about plagiarism during the semester in which this course is offered, in which plagiarism is defined and characterized. Once the course is over, the subject will not reappear on any other course descriptions; these courses will simply follow the content of their own subject matter.

Similarly, the other issues that are involved in academic dishonesty are not dealt with. Ethics are usually discussed only in the context of the course that is pedagogically planned for this purpose. Take, for example, the “Medical Bioethics” course (or other similar courses). This course greatly emphasizes controversial medical interventions, such as euthanasia, abortion, organ transplants, but only touches upon the day-to-day transgressions, such as the issuance of improper doctor’s notes, absences and delays when doctors should be on-call, the disrespect of patients, the consequences of this behavior for society and the way in which academic dishonesty factors into the behavior of the future doctor. Once the course has been completed, even if the student passed with the highest grades, this will not be a determining factor in the future ethical behavior of that health care professional.

In addition, rarely does one encounter an undergraduate course where a formal link is established between the student and the professor, in which the professor regularly monitors the student through meetings in order to evaluate his scholastic performance and provide him with proper orientation. As the institution tends to monitor the professor only in terms of his presiding over the required amount of classes, those activities that involve guidance, publication, the analysis of papers that were written by his students, counseling and *feedback* with respect to ethical conduct remain relegated to the background, or, perhaps, are overlooked entirely. This occurs as frequently the activities of professors are dedicated exclusively to the completion of course work and the application of exams. In addition, the salaries that the professors earn often exclusively reflect the hours during which they work in the classroom. In other words, within this scenario, what incentive does a professor have to provide advice to a student, to participate in his research, to publish the research together, to

monitor the student's work and exams, or to provide feedback and demand improvement?

In order to prepare a good doctor in Brazil, for example, the proposed six years of university schooling is not sufficient. Sixteen years are generally invested, considering that the formal schooling of the student did not begin merely after his college entrance exam, but evolved from preschool, influenced by the positive and negative feedback that he received during all these years, which were assimilated throughout that journey. This feedback includes the set of consequences, or the lack thereof, with respect to any behaviors involving academic dishonesty that the student may have been exposed to during his academic development. Once in medical school, the future doctor, whose character is still developing, will be influenced by the academic culture of that institution. If this culture generally tolerant of deviations and of academic dishonesty, this will certainly influence the professional development of this health care professional and his attitudes with respect to the practice of his craft. The levels of tolerance and the values that are conveyed to the students will establish the internal culture of that institution, much as recently admitted students will tend to adapt themselves to the dynamic that they encounter upon arrival. Take the example of USP (University of São Paulo), mentioned above: upon dismissing a professor (due to plagiarism) with 15 years of tenure, what message did the institution convey to its student body?

Final considerations

Ethics is a subject matter that has always been, and will always be, a matter of debate, which is frequently confused with or linked to morality and to themes related to law. While morality and law may change as a function of the passage of time or with respect to geographic location, only ethics are inherent to the free will of the individual.

Academic dishonesty, in its entirety, and especially the issues that are related to plagiarism and "cheating", is a subject matter that is not limited to the specific university courses that discuss it; it permeates the entire breadth of a system of developing a civically conscious citizen. In general, medical universities/colleges accept students that are 18 years old and return them to society at the age of 24 as certified health care professionals that are responsible for dealing with the population's health care needs. The professional honesty of these individuals

will be strongly correlated with the academic honesty that they assimilated during their years in university.

One may conclude, therefore, that the institutions that are most successful in developing health care professionals of the highest quality will be those which, in addition to providing excellence in technical training, also work diligently towards instilling a sound culture of developing students' integrity, counseling them and demanding honesty from them honestly at all times. This issue must be dealt with continuously, in all university courses, at every stage of the development of the students, by all professors, who also must be continuously trained by the institution. The rules must be clear and must be routinely reiterated. The application of these regulations must be monitored and good examples must be publicized; bad examples, on the other hand, should face harsh penalties, which should also be widely disseminated and not treated as isolated cases.

The fostering of an environment that dissuades students from plagiarism, in which "cheating" is eliminated and creativity and academic honesty, in all its forms, is promoted, is of the utmost importance. In every case, the academic institution should implement measures to dissuade poor conduct amongst its students; in not doing so, the institution is encouraging its students to transfer to their professional careers the same deceitful behavior, which is highly detrimental to the collective interests of society.

This will only come to fruition, however, by means of a "ripple effect". In other words, the principles and institutional values must be implemented at each level, from the dean's office, to lower levels of administration, to the professors and other staff, and to the students. Each level must adhere to the same ethical standards. There is no recipe for success that will work on a certain level of the institution if all levels do not function under the same spirit of incorporating best practice, and, in doing so, implementing the ethical culture of the institution.

If Brazil were to commit itself to this path, perhaps it would one day reach the point that Germany did, in which a situation involving plagiarism could cause the resignation of a minister. Brazilian politicians do not usually succumb to such fates even when they have been proven to have participated in deep-rooted financial scandals, which gives an idea of the size of the problem and how far Brazilian society must still improve its ethical standards.

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Participation of the authors'

Rodolfo Neiva de Sousa proposed the preliminary structure of the article, developed the argument, performed the bibliographic review and was the main author of the text. Valdinei Klein Conti included topics, performed the bibliographic review and criticism and recommended improvements in the text. Alvaro Angelo Salles included the topics, recommended exclusions, performed the bibliographic, orthographic and critical review and suggested alterations and improvements to the basis of the arguments. Ivana de Cássia Raimundo Mussel performed a general, orthographic and critical review, recommended inclusions, suppressions and changes to the formation and structure of the text.

