

Adjusting The Academic Integrity's Atmosphere among Medical Students: An Exploratory Study

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ABSTRACT

Background: The academic integrity known as part of academic culture and consist of moral values that having relationship with medical professionalism. The academic integrity term is more easily recalled through academic misconduct. The academic misconduct during medical school were the main predictor as they becoming future medical doctor.

Aims: to explore the medical students and teachers' perceptions about the academic integrity and academic honesty

Methods: The phenomenology approach conducted and eighteen respondents involved in four focus group discussion and five respondents in in-depth interviews separately. Data analysed using thematic analysis, using the steps for coding and theorization method.

Results: Two main themes were identified; the academic integrity and shaping medical professionalism through academic honesty. The issue of academic misconduct and dishonesty were emerged, in line with the negativity bias theory.

Conclusion: It is our collective homework as medical teacher and programme managers, to develop appropriate learning model for each medical school.

Keywords: Academic honesty, medical professionalism, medical teachert

PRACTICE POINTS

- The academic integrity has a good impact in building academic honesty, which is related to medical professionalism.
- Developing an appropriate model in learning academic integrity because it is based on the negativity-bias theory.

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INTRODUCTION

Integrity is behaviour that characterizes as the personality of a nation and is a major part of academic culture. The Academic integrity is a quality of behaviour that is currently increasingly difficult to find and seen, especially in academic life at higher education. Acts of dishonesty such as cheating, copying signatures, and entrusting attendance have become common to do.¹ The Academic integrity, as a theory or concept, was developed based on these five main values, so it can also be interpreted as high compliance with academic behaviour agreements consisting of these five values.^{1,2} Academic honesty is considered an important part of academic integrity, so that when discussing academic integrity is often associated with the practice of academic dishonesty. So far, academic integrity has often been promoted by showing a prohibition against several things that constitute academic dishonesty. Academic integrity should be introduced by prioritizing values and things that reflect honest academic behaviour.^{1,3}

McCabe and Trevino's research in 1995 (in McCabe and Pavela, 2000), stated that in educational institutions that have joint guidelines or codes of conduct regarding the value of academic integrity, the frequency of occurrence of academic dishonesty is only 54% compared to other institutions. Those who do not have guidelines are 71%. Other results from this research state that the climate or culture of academic integrity in educational institutions is a determining factor in the high and low incidence of student academic dishonesty.⁴

The Ministry of Education, Culture, Research and Technology issued regulation number 39 of 2021 concerning Academic Integrity in Producing Scientific Work. This regulation regulates the implementation of academic integrity in higher education activities (it called Tridharma activities of higher education), especially regarding academic dishonesty, to prevent plagiarism among the academic community; lecturers and students. The regulation states that Academic Integrity is defined as a commitment that is realized in the tri dharma activities of higher education which is based on noble values; honesty, trust, justice, honor, responsibility and determination.⁵

The academic integrity demonstrated by students during medical education is considered a predictor of when the student will pursue the medical profession in the future.¹ This shows the relationship between academic integrity and medical morality. Academic integrity is defined as actions that are truly carried out, as a manifestation of five basic values, namely honesty, mutual trust, justice, mutual respect or mutual respect, and responsibility.³

Successful implementation of academic integrity will be able to prepare students to become individuals and health professionals who are ready to face challenges (future success). Medical students' academic integrity is very necessary in forming their professionalism and morality as doctors. The formation of academic integrity can be done through the formal curriculum, hidden curriculum, the role models, as well as socialization and effective communication related to academic integration in the academic community in general.⁶ Students have high expectation for their teachers, to be role models in developing students' academic integrity. At the same time, students also note that not all lecturers understand and can practice academic integrity. Students do not see the importance of academic integrity for the academic community, this becomes a motivation for students to commit academic dishonesty.^{1,7} This is in line with the negativity bias theory put forward by psychologists Paul Rozin and Edward Royzman in 2001, that we will learn something more easily if it has negative value. Our students assume that it is more easier to remember bad ones. This statement is related to academic honesty, that the students remember more is everything related to academic dishonesty/misconduct.^{8,9}

In our institution, the Students' Ethics and Discipline Committee was established in 2022. Since then, several cases have been addressed including one major disciplinary violation and three moderate violations. The violations such as cheating in computer-based test exams, attempting-breaches of computer-based test systems, and signature fabrications. The academic integrity learning process as a form of preventing academic dishonesty in the Medical Study Program, Faculty

of Medicine, Universitas Tanjungpura is carried out through formal and hidden curricula. Formal learning is carried out through the Bioethics and Professionalism Module (1st semester), Research Module (2nd semester), training in the application of basic clinical skills, and integration of Bioethics and Research material in each module in the academic phase (spiral curriculum). The hidden-curricula is implemented through medical teachers' role as lecture, academic advisors, role models, tutors, and facilitators.¹⁰ Periodically workshop conducted by university was held to enhance medical teachers role in teaching-learning, facilitating group-discussion, and as an academic advisors. This strategy is carried out so that the formation of professional behaviour can be started early, trained and practiced repeatedly, as well as showing good institutional support for the formation of academic integrity as an important part in the formation of doctors' professional behaviour.^{8,9} This study aimed to explore students and medical teachers' perspective about academic integrity to shaping academic honesty in line with the developing of medical professionalism is needed.

METHODS

The qualitative study using a phenomenology approach to understand the essence of human experience was conducted at Medical Study Programme, Faculty of Medicine, Universitas Tanjungpura, West Kalimantan, Indonesia, from

May to November 2023. The study comprised medical students, medical teachers, and programme manager. After gaining permission from the institutional ethics review board, purposive sampling with maximum variation was used to assemble subjects from a population of medical students, medical teachers, and programme managers. Respondents were persuaded to actively participate in four focus group discussions (FGDs), which were divided into several types of respondents. The guideline of FGDs and interview developed before data collection began (table 1).

The first FGD invited twelve medical students (MS) from academic phase that chosen based on gender, GPAs, and student selections' pathway. The second FGD with six medical teachers (MT), that chosen based on gender, age, and length of working. In addition to obtain triangulation data, in-depth interviews (IDV) were held to receive data from five programme managers (PM) which were the Dean, Vice Dean of Academic Affairs, two members of Quality Assurance Unit, and one member of Medical Education Unit. FGDs and interviews were conducted until data saturation was reached. All FGDs were moderated by a medical teacher from the same institution. Data was analysed using the steps for coding and theorization method. The process began with verbatim transcription, which the participants then checked. The thematic analysis stage was conducted first by an author and

Table 1. The In-depth Interview/FGDs Protocol

Topics	Academic Year
1 Academic integrity	What do you think about academic integrity? What is the value of in academic integrity? Can you briefly state that academic integrity had been taught in our teaching-learning in medical school activities? What relationship among academic integrity and medical professionalism?
2 Academic misconduct	What do you think about academic misconduct in medical education? From your experience, can you mention the type/example of academic misconduct?
3 Academic integrity learning process	What type of learning process you think the best to deliver academic integrity in medical education? Does it have to start earlier, integrated, or you have another perception?
4 Medical teacher as role model	Do you think medical teachers as role model play a role in the teaching-learning process of academic integrity? What kind of medical teacher could become a role model in academic integrity?

then by the rest of the authors. The next step was reading and re-reading the data until the authors familiarize with the data and capable identified the data that suited according to the study objective. The developed theme and related coding were put and defined based on the objective.

The medical school has a total 37 medical teachers-34 person are medical doctors and 700 medical students. A competency-based curriculum with problem-based learning has been used as the primary teaching method since 2005. Professionalism teaching method conducted spirally, beginning in the first year and integrated in basic clinical skills practices.

RESULTS AND DISCUSSION

There were eighteen respondents in four FGDs and five indepth-interviews that were held separately ith programme managers. Two themes were identified and followed by four concepts (table 2). The first theme was the academic integrity. All respondents stated that academic integrity were a unified moral principle of honesty, responsibility and justice, which can be learned and taught, and it is a characteristic of the academic society. Academic integrity is also an important factor in maintaining the quality of learning in the academic environment. Academic integrity is defined as actions carried out seriously, as a manifestation of five basic values; honesty, trust, justice, respect for others, and responsibility.³ Academic integrity, as a theory or concept developed based on the five main values, so that academic integrity is also defined as high compliance with the academic behaviour agreement which consists of these five values.² Academic honesty is considered an important part of academic integrity, so that when discussing academic integrity it is often associated

with the implementation of academic dishonesty (academic misconduct). Academic integrity is stated as a complete unity of five basic values which are considered important for the health profession and must be implemented in professional behaviour. It is hoped that this attitude can be translated and applied well by the entire academic community. The five basic values of academic integrity are honesty, trust, justice, respect for others, and responsibility.¹¹

The respondents identified two main role medical teachers in learning process of academic integrity; as role model and a curriculum compiler. All respondents stated that role model medical teachers set an example, especially in building academic integrity, while carrying out his role simultaneously, as a lecturer and doctor. This is in accordance with previous research conducted by Armyanti, that a role model is an admired individual and the role-modelling process can be done consciously and unconsciously performed by medical teachers. Students emulated their teacher’s roles as both a teacher and a medical doctor/physicians.¹² A medical teacher who transferred his knowledge and trained psychomotor skills also became the pivot example of professional values and behaviour for their students. This is also in line with Maudsley’s argument that a role model is an important component in implementing an effective medical education.¹³

The respondents believe that all medical teacher were able to develop the basic requirements that medical students need to become professional medical doctors. The role of lecturers as curriculum compilers also requires institutional support. This support can take the form of policies, support for the allocation of learning time, and the availability of funds for moral values learning process.

Table 2. Themes, Concept, and Quotation

No	Theme	Concept	Quotes	Code
1	The Academic integrity	The meaning of academic integrity	“If we discuss about academic integrity, its definitely related to moral values, especially honesty, justice, and truth. All of it have to be practice in our academic environment”academic integrity and medical professionalism?	MS2, FGD1

No	Theme	Concept	Quotes	Code
			“The academic integrity determines the quality of our graduates, because it contains the values of honesty, justice, and responsibility. It must be taught and also instilled in the entire academic society. We have to believe that if the environment is good, the society will also be good, and that is our characteristics”	PM2, IDV
		The role of medical teacher in learning process of academic integrity	“Our teachers should be obliged to prepare teaching materials. If academic integrity and honesty are requirements for becoming a professional medical doctor, it must be in accordance with our curriculum. They must have a good understanding first, then they can teach their students”	MT3, FGD2
			“Our teachers sometimes show dishonesty behaviour, for example, changing schedules or being late for group discussion, but there is no explanation”	MS8, FGD2
2	Shaping medical professionalism through academic honesty	The meaning of academic honesty	“The academic honesty means we don’t cheat. Do not copy our friends report. Do not leave a signature, if you are absence”	MS1, FGD1
			“Academic honesty is a responsible trait. When taking an exam, do not cheat. Nowadays, talking about honesty often reminded with dishonest behaviour, such as lying and cheating”	PM5, IDV
		The learning process through academic honesty	“The easiest way to learn honesty is actually by looking at role models. Look at how he acts and speaks, especially when role-playing in the community or in clinical settings”	MS6, FGD2
			“The learning process of academic honesty should be implemented through a systematic modul. Starting with understanding, reasoning, and explaining its relationship to the medical professionalism”	MT2, FGD1
			“Even though it rarely happens, I think cultural competence also plays a role in academic honesty learning process, because it is a cultural value”	PM1, IDV

The second theme was shaping medical professionalism through academic honesty. Respondents defined academic honesty as a moral value related to a sense of responsibility for an action, not cheating, and not lying. This is also in accordance with the definition of honesty according to the Big Indonesian Dictionary. Honesty is being honest, not cheating and not lying.² Research conducted previously by Joseph Wu stated that the academic honesty endorsed effectively using punishment as an intervention to reduce motivation to cheat, but it also believed that it would not enhance motivation for honest behaviours.¹⁴ The other definition of academic honesty according to Appiah argument that honesty is being loyal to a colleague, covering their friends up and standing by them as well. It is recommended that, Students who obey the school obligation and regulations should be stimulated by the school manager programme, to encourage the other students to do the same. It is also stated that parents and educators should encourage the teaching of moral values to instill in students the benefits.¹⁵ This statement is in line with the negativity bias theory that stated previously. The negativity bias is a cognitive bias that results in adverse events having a more significant impact on our psychological state than positive events. Negativity bias occurs when negative and positive events are of the same dimensions, meaning we feel negative effects more greatly.^{16,17}

The respondents argued that learning process of academic honesty to develop medical professionalism were through role-modelling process, formal curriculum, and through learning cultural competences. Armyanti arguments in line with this study, that professionalism learning is conducted by medical teachers' role modelling process. The first step of the role modelling process is the selection of a teacher who is considered to become a role model. The social learning and the motivation theory, which states that the selection of a role model is based on students' competence as observers of their medical teachers' behaviour. The ability to spot their teachers as a role model is an important component in the role modelling process since the basic principle of learning from a role

model is to observe and identify others' positive or negative behaviours. The aforementioned principle that identification is the first step to learn from role models. The internalisation of professional value occurs afterwards. Moreover, the result of this study is in accordance with the basic theory of role modelling, cognitive apprenticeship, which indicates that learning from a role model should be augmented by an articulating process in which every steps that is done or not done by a teacher in a specific situation has various objectives that should be explained to the students.¹² In contrast, Wu stated that demonstrating good concepts of academic honesty is a sign that academic honesty education was already done. The students attributed dishonest motivation to insufficient capability to perform academic duty, which they described as a common problem nowadays.¹⁵ Formal curriculum needed to teach academic honesty in medical education, in line with the research conducted by Shapoval, that stated academic honesty is an integral part of both ensuring the quality of higher education and conducting research.¹⁸

Despite this, we must acknowledge that the hidden curriculum, which is deeply embedded in the educational culture of all academic communities, plays a crucial role in shaping professionalism. To reinforce this, regulations on ethics and academic integrity were established for the first time at our university in 2024, followed by socialization efforts among students and the entire academic community. The regulation classified the violations and punishment using the major to minor violation classification. It aligns with the earlier statement that academic honesty is more often recognized easily through its negative aspects such as cases of academic dishonesty and the punishment.

CONCLUSION

Medical students and teachers have the same perspective in academic integrity and its role in shaping medical professionalism, through building academic honesty. Unfortunately, academic integrity is notorious through its establishment of academic misconduct. In line with the negativity bias theory. Future research should develop a broad

understanding among regional medical schools, to develop teaching-learning and assessment models that can be adapted to each medical school.

RECOMMENDATIONS

The faculty development programme targeted in strengthening the role model function of medical teachers focus on programs that help them to articulate and demonstrate the principles of academic honesty to building academic integrity atmospheres. We have to ensure that the academic honesty climate is not only maintained but enhanced continuously.

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COMPETING INTEREST

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AUTHORS' CONTRIBUTION

Ita Armyanti – developing research proposal, collecting data, data analysis, and publication manuscript.

Agustina Arundina Triharja Tejoyuwono – developing research proposal, data analysis, and publication manuscript.

Muhammad Asroruddin - publication manuscript.

Zulfa Khairunnisa Ishan - data analysis and publication manuscript.

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