CHAPTER 1
GENERAL PEDAGOGY AND HISTORY OF PEDAGOGY

ACQUISITION OF ACADEMIC INTEGRITY COMPETENCIES BY POSTGRADUATE STUDENTS AND THEIR IMPACT ON THEIR SCIENTIFIC ACTIVITY

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Abstract. Academic integrity plays an important role in everyone's research, especially for graduate students who are in the early stages of their careers. The purpose of the article is to establish the basic competencies in the field of academic integrity that postgraduate students should possess. The main methods that were used in the research are analysis and synthesis, methods of comparative analysis, generalization, which made it possible to achieve the set goal. The methodological basis of the study was a survey of postgraduate students of Ukrainian universities. Based on the results of the literature review, the authors systematized the main forms of violations of academic integrity that graduate students may encounter during their studies. Based on the results of a survey of postgraduate students, the main issues of compliance with academic integrity were investigated: compliance with the code of academic integrity of the university; availability of persons responsible for familiarizing postgraduate students with issues of academic integrity; the main forms of violations of academic integrity that postgraduate students may encounter during their studies; the main decisions made as a result of the detection of cases of violation of academic integrity; core competencies that graduate students would like to possess to prevent academic integrity violations. The main measures to inform postgraduate students about the observance of academic integrity have been proposed.

Keywords: graduate student, academic integrity, breach of academic integrity, competencies, research.

JEL Classification: A23, A29, I28
Formulas: 0; fig.: 5; tabl.: 1; bibl.: 8

Introduction. The scientific activity of any researcher is impossible without compliance with the code of ethics and norms of academic integrity. Postgraduate students, as early-career researchers, need to understand the importance of the impact of academic integrity on their future scientific careers and the formation of a positive image of their research results.

Studying the basics of academic integrity and understanding the consequences of its violation is an integral part of the training of postgraduate students.

Most universities in their activities use the general norms of academic integrity, as well as their own codes approved by the decisions of the Academic Council.

Literature review. In article "An Academic Integrity Approach to Learning and Assessment Design", Hamilton, M.; Richardson, J. (2007) discussed the role of the educator in terms of designing a learning environment for the student which encourages the student to develop their own academic integrity. In such an environment, there is no need for the student to resort to plagiarism, as the learning and assessment tasks are not conducive to cheating, being unique and challenging for each student, regardless of the number of students enrolled in the particular course. They consider the learning design approach to assessment in the context of high-level vocational education. Educational resources are designed to support work-based knowledge and personal development capabilities. Educators assess to provide for professions, work contexts and individual learning needs. The major focus of this paper is discussion of the design of learning approaches and assessment tasks that disenable plagiarism and cheating, and promote problem-solving skills, academic integrity and creativity.

The conceptual review "Academic integrity at doctoral level: the influence of the imposter phenomenon and cultural differences on academic writing" seeks to reframe the view of academic integrity as something to be enforced to an academic skill that needs to be developed (Jennifer Cutri, Amarpreet Abraham, Yeni Karlina, Sweta Vijaykumar Patel, Mehdi Moharami, Shaoru Zeng, Elham Manzari, Lynette Pretorius, 2021). The authors highlight how practices within academia create an environment where feelings of inadequacy thrive, leading to behaviours of unintentional academic misconduct. Importantly, this review includes practical suggestions to help educators and higher education institutions support doctoral students' academic integrity skills. In particular, the authors highlight the importance of explicit academic integrity instruction, support for the development of academic literacy skills, and changes in supervisory practices that encourage student and supervisor reflexivity. Therefore, this review argues that, through the use of these practical strategies, academia can become a space where a culture of academic integrity can flourish.

In 1999, the Committee on Publication Ethics (COPE) defined plagiarism as "Plagiarism ranges from the unreferenced use of others' published and unpublished ideas including research grant applications to submission under new authorship of a complex paper, sometimes in a different language. It may occur at any stage of planning, research, writing or publication; it applies to print and electronic versions."

Taking into account the main practices of publishing activity, we systematized the main forms of plagiarism (Table 1).

1. Academic plagiarism
2. Self-plagiarism
3. Fabrication
4. Falsification
5. Deception
6. Non-objective assessment

Table 1. The main forms of academic integrity violations

Forms	Description
1. Academic plagiarism	plagiarism of fragments of written works and full texts;
	plagiarism of ideas, data, models, illustrations, etc.;
	lack of proper references in the absence of attribution of authorship;
	citation errors
2. Self-plagiarism	duplication of publications — publication of the same scientific work (completely or with minor changes) in several editions, as well as re-publication (completely or with minor changes) of previously published articles, monographs, other scientific works as new scientific works;
	duplication of scientific results — publication in full or in part of the same scientific results in various articles, monographs, other scientific works as new results that are published for the first time;
	presentation in the reports on the implementation of various scientific projects of the same results as those obtained during the implementation of the corresponding project
	re-submission by students of written works, which were already submitted as reports from other disciplines, without the teacher's permission;
	aggregation or addition of data — combining previously published and new data without dividing them with relevant references to the previous publication;
	re-analysis of previously published data without reference to the previous publication of these data and their previously performed analysis
3. Fabrication	citation of fictional or unverified data, in particular statistical data, results of experiments, calculations or empirical studies, photographs, audio and video materials, etc., in written works of applicants and in scientific works;
	reference to fictitious sources of information or intentional reference to a non-genuine source;
	attributing to others texts, opinions or ideas that they did not express or publish
4. Falsification	unjustified correction of the results of one's own scientific research or performance of educational tasks (one that is not based on repeated or additional research, measurements or calculations, correction of identified errors, etc.);
	citation in written works of applicants and in scientific works of deliberately changed literary data and data obtained from other sources; in particular, statistical data, results of experiments, calculations or empirical studies, photographs, audio and video materials, etc. without proper substantiation of the reasons and indication of the method of their correction;
	providing incomplete or distorted information about the approval of research and development results
5. Deception	inclusion of persons who did not take qualified participation6 in their preparation as co-authors of scientific publications;
	non-inclusion in co-authors of scientific publications of persons who took qualified participation in their preparation;
	submitting as the results of one's own work works commissioned by other persons, or works for which the real authors have given consent for such use;
	submission or presentation by different persons of works with the same content as a result of their own educational activity;
	writing other people's versions of tasks at control events;
	use of a system of hidden signals (sound, gestures, etc.) when performing group control measures with the same options;
	non-independent performance of tasks in cases where receiving assistance is not allowed, or failure to specify information about received assistance, consultations, cooperation;

Forms	Description
	passing knowledge control procedures by fake persons;
	simulation of deterioration of the state of health, illness in order to avoid control measures;
	providing feedback or reviews on scientific or educational works without proper examination of them
6. Non-objective assessment	deliberate overestimation or underestimation of the learning outcomes of education seekers;
	untimely notification of education seekers about the system of evaluation of learning results;
	application of an evaluation system that does not correspond to the declared goals and objectives of the topic, discipline, practice, educational program, etc.;
	lack of objective evaluation criteria

Source: developed by the authors based on []

Aims. The purpose of the article is to establish the basic competencies in the field of academic integrity that postgraduate students should possess.

Methods. The main methods that were used in the research are analysis and synthesis, methods of comparative analysis, generalization, which made it possible to achieve the set goal.

The methodological basis of the study was a survey of postgraduate students of Ukrainian universities, which was conducted online using a Google form in the period from September 1 to November 1, 2022. The 1,347 graduate students of various specialties, including humanitarian, social, technical and natural sciences, took part in the survey. The 63% of respondents were women and 37% were men.

Results. During the survey, postgraduate students were asked about their awareness of the existence and text of a Code of Academic Integrity or a similar document at their university (Figure 1).
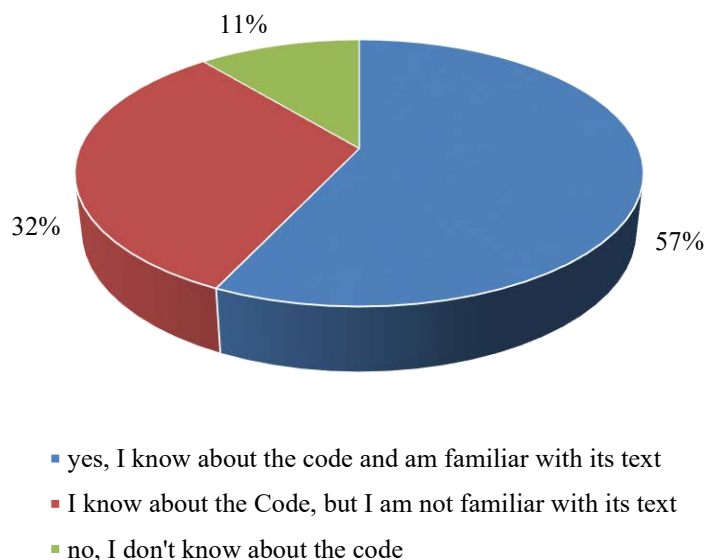

- yes, I know about the code and am familiar with its text
- I know about the Code, but I am not familiar with its text
- no, I don't know about the code

Figure 1. Postgraduate students' awareness of the existence and text of the Code of Academic Integrity or a similar document at their university
Source: developed by the authors based on the results of a survey

Postgraduate students were asked who exactly informed them about the need to read and comply with the Code of Academic Integrity or a similar document (Figure 2).
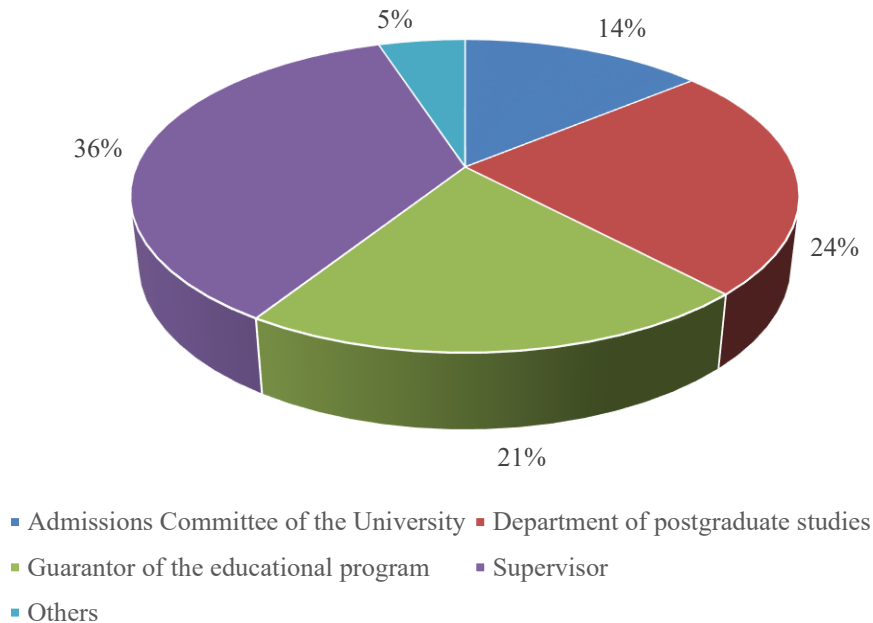

Figure 2. The main persons who informed postgraduate students about the need to familiarize themselves with and observe the norms of the Code of Academic Integrity or a similar document
Source: developed by the authors based on the results of a survey

As can be seen from the answers, in most cases, it is the academic supervisor of postgraduate students and the guarantor of the educational program who are given the main role in teaching postgraduate students to observe academic integrity.

Postgraduate students were asked what forms of academic integrity violations they encountered during their studies (Figure 3).
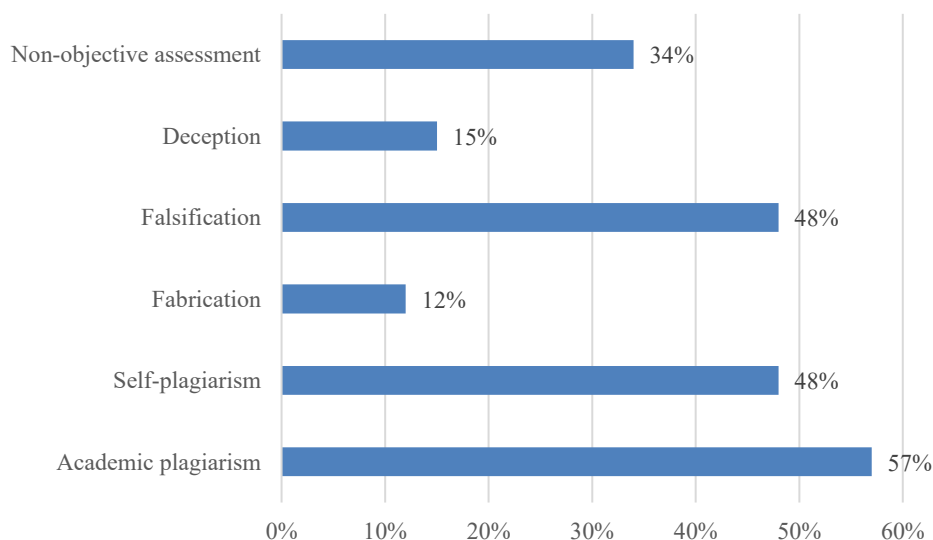

Figure 3. The main forms of violations of academic integrity encountered by postgraduate students during their studies
Source: developed by the authors based on the results of a survey

As can be seen from the answers, academic plagiarism (57%), self-plagiarism (48%) and falsification (48%) are the most common.

Postgraduate students were asked whether action had been taken to prosecute those who breached academic integrity (Figure 4).
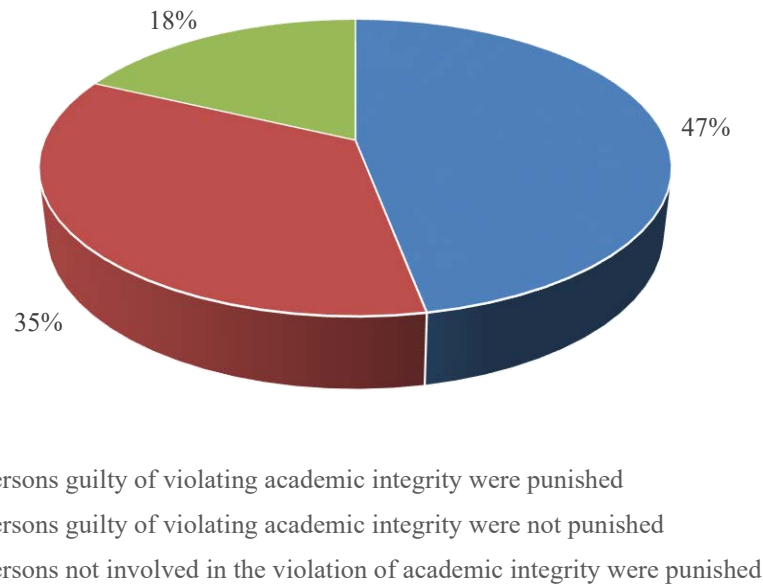

- Persons guilty of violating academic integrity were punished
- Persons guilty of violating academic integrity were not punished
- Persons not involved in the violation of academic integrity were punished

Figure 4. Answers of graduate students regarding cases of prosecution of persons who violated academic integrity
Source: developed by the authors based on the results of a survey

The received answers indicate a low level of punishment of persons guilty of violating academic integrity, which indicates ineffective communication between graduate students and university management regarding issues of academic integrity.

The degree of seriousness of violations may differ according to the types of violations, their repetition, types of works (current written tasks, final certification in the discipline, final certification at a certain level of education, dissertations, monographs, scientific publications, scientific reports, etc.) etc.

The main types of liability of postgraduate students for violation of academic integrity can be:
- repeated assessment (test, exam, credit, etc.);
- repeating the relevant educational component of the educational program;
- deductions from the educational institution (except for persons who obtain general secondary education);
- deprivation of an academic scholarship;
- deprivation of tuition benefits provided by the educational institution.

In addition to the legally defined forms of academic responsibility, universities may apply:

a verbal remark from a teacher or an authorized representative of the administration (head of the department, faculty, etc.);
• warning about the possibility of being brought to academic responsibility;
• referral to additional training on issues of academic integrity;
• repeating the task;

• reducing the grade for the task;

• making a permanent or temporary entry in the register of violations of academic integrity (this entry may be available to potential employers, higher education institutions upon admission to study or work, as well as in other cases determined by internal regulatory documents);

• verbal or written notification of a legal or physical entity paying for education about the fact of violation;

• exclusion from the rating of applicants for receiving an academic scholarship or the calculation of penalty points in such a rating;

• deprivation of honorary titles, awards, scholarships, etc., awarded by a higher education institution;

• deprivation of the right to vote in the collegial management bodies of the institution of higher education or limitation of the right to participate in the work of such bodies for a certain period;

• deprivation of the right to participate in competitions for obtaining funding for scientific research, scholarships, grants, etc.;

• deduction or dismissal.

At the same time, it should be taken into account that certain types of responsibility can simultaneously be types of disciplinary or administrative responsibility. In this case, they can be applied only in the cases and in the order defined by the laws.

Postgraduate students were asked about competencies that would help them not violate academic integrity (Figure 5).
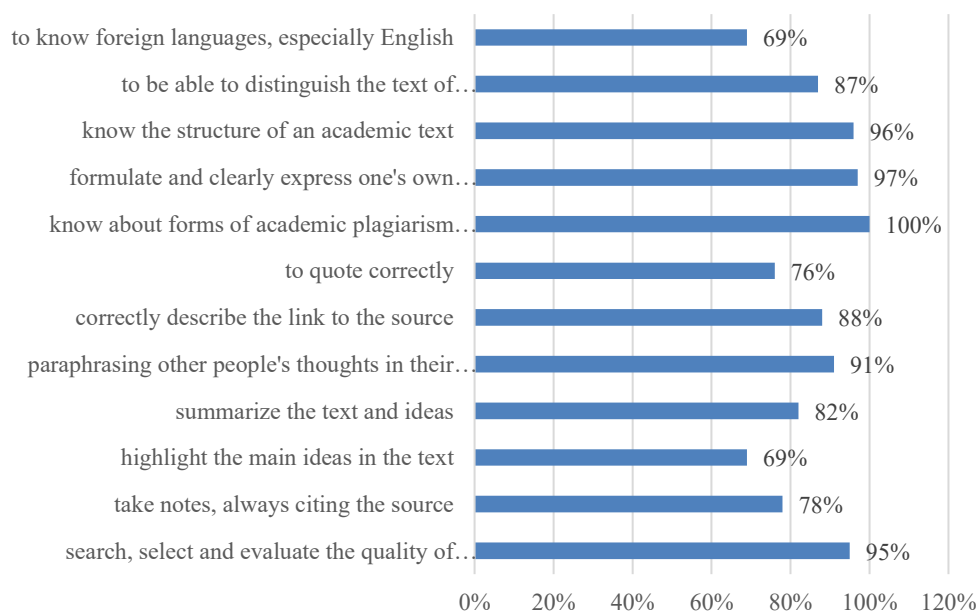

Figure 5. Basic competencies needed by graduate students to prevent violations of academic integrity
Source: developed by the authors based on the results of a survey

The results of the survey indicate a high level of understanding by postgraduate students of the need to observe academic integrity and the competencies they need for this.

As the results of the survey showed, graduate students need separate awareness measures on all issues of academic integrity.

Discussion. In our opinion, the results of the conducted survey of postgraduate students indicate the need to carry out explanatory activities in order to increase awareness and observe academic integrity. The main such measures can be:

– explain the requirements related to the written task, as well as the essence, features and reasons for the inadmissibility of academic plagiarism as early as possible, at the beginning of each discipline;
– explain to postgraduate students the value of acquiring new knowledge, academic norms that must be followed, why they are important, what academic integrity is, what its values are, what it serves, how students can contribute to it by their actions development;
– provide postgraduate students with clear information about the rules of academic writing;
– prescribe a policy on academic plagiarism in the course syllabus;
– formulate the tasks in such a way that they cannot be plagiarized (analytical, not reproducible formulation of the task; high specification of the task; processing of specific sources and data);
– make sure that the requirements for the task and the criteria for its assessment have been properly explained. The requirements for written works (volume, style of citation, permissible number of citations, design rules, etc.) should be clearly prescribed in methodological materials for students;
– develop non-standard, creative tasks, update them annually;
– give postgraduate students examples of finished works;
– discuss with postgraduate students the examples of high-quality and low-quality academic writing;
– during the postgraduate student's work on the text, conduct at least one intermediate check of the draft version of the written work, provide feedback and recommendations to
– text or structure the execution of the work in time with intermediate checks of each stage of its preparation;
– postgraduate students can review each other's work: provide them with evaluation criteria for this.

Conclusion. Based on the results of the research, it is appropriate to draw the following conclusions. Based on the results of the literature review, the authors systematized the main forms of violations of academic integrity that graduate students may encounter during their studies.

Based on the results of a survey of postgraduate students, the main issues of compliance with academic integrity were investigated: compliance with the code of academic integrity of the university; availability of persons responsible for familiarizing postgraduate students with issues of academic integrity; the main forms of violations of academic integrity that postgraduate students may encounter during their studies; the main decisions made as a result of the detection of cases of violation of academic integrity; core competencies that graduate students would like to possess

to prevent academic integrity violations. The main measures to inform postgraduate students about the observance of academic integrity have been proposed.

Author contributions. The authors contributed equally.

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