

Institutional Plagiarism Policy (Georgian higher education institutions' case)

Natela Doghonadze*
Ekaterine Pipia**
Nikoloz Parjanadze***

Abstract

The article deals with various aspects of plagiarism: definition (discriminating it from cheating and copyright violation), types (intended / unintended), involved people, causes, prevention, detection and punishment of plagiarism. A survey (questionnaire containing 42 items to be assessed in a 5-point Likert scale and one open-ended item) was conducted in Georgia. The questionnaire developed based on the literature review was uploaded on social media in three variants (to analyze the results separately and compare them): for students, for researchers and for assessors. The obtained results revealed that the opinions of the three groups of respondents differed to a certain degree, but were quite similar, eventually. The survey disclosed the existing problems, such as: lack of academic writing (in the native and especially foreign language) and research skills, lack of training in avoiding plagiarism, insufficiently clear university policies in the area, the emphasis on punishment instead of prevention, etc. Based on the obtained results recommendations for universities are given concerning plagiarism policies.

Keywords: plagiarism, cheating, copyright, plagiarism detection devices, plagiarism prevention, punishment for plagiarism

Introduction

On the one hand, nowadays higher education is becoming more research-oriented (Van Dusen, 2013). Research is moving to universities, for instance, over two thirds of research done in Australian universities attract both governmental and private funding (Group of Eight, 2012). Universities (both academic staff and students) are required to be involved in research (Blomster, Venn and Virtanen, 2014). Student involvement in research is a must in practically all master's and all doctorate programs.

Schoolchildren normally need to have knowledge (on issues like Shakespeare's views on power or equality of triangles) and are seldom asked to name the scientist who and when studied and in which publication presented

* Prof. Dr. International Black Sea University, Georgia
nateladoghonadze@ibsu.edu.ge

** Prof. Dr. International Black Sea University, Georgia
ekapipia@ibsu.edu.ge

** Prof. Dr. International Black Sea University, Georgia
nparjanadze@ibsu.edu.ge

the issue to the public. The exceptions are probably the laws of nature named after their discoverers (like Newton's laws of mechanics). Admission exams also concentrate on knowledge and not on its sources (Sadoshima [2014] as cited in Teeter [2015]). On the other hand, university students, especially doing their BA, MA and PhD papers and theses, are expected, due to academic ethics and copyright requirements, to mention where the information they mention comes from. This is because research, compared to just knowledge, to gain which using course books is sufficient, requires the application of numerous sources (not to reinvent a bicycle) and development of critical, analytical and creative skills, which school graduates often do not possess. So the transition stage between being a schoolchild and a university student is difficult and responsible. This is the time when students need to begin the understanding of importance and the technical respects of referencing. It requires a special policy both on the State and the universities part.

Marketization of society makes educational services part of the market (Van Dusen, 2013), due to which many universities transform into entrepreneurial ones (Bikse, Lusena-Ezera, Rivza and Volkova, 2016). Getting a university diploma and an academic degree is often viewed not simply as a means of gaining knowledge, getting employment and developing the career (Kennett, Reed, & Lam, 2011), but also as a good which can be bought and sold instead of being gained through hard labor (Bolkan, 2006). Too many people are trying to get diplomas and degrees fast and easily. This is only possible through academic misconduct (cheating, plagiarism and self-plagiarism). Much research based on anonymous self-reporting (Norton et al. 2001; Pitchford, 2012; Starovoytova and Namango, 2016) has shown that a high percentage of university students have at least once in the term of their studies used cheating and / or plagiarism. Research also shows that during the last two decades plagiarism has been on the increase (Eaton, Guglielmin, and Kojo Otoo, 2017; Ellery, 2008; Park, 2003; Perry, 2010; Pitchford, 2012). This is surprising enough, as before 1980 universities in the US did not pursue intellectual property too much. Only with the introduction of Bayh-Dole legislation research could not anymore be available freely for public, but its application, according to the market laws, had to be regulated by copyright legislation. The issue of plagiarism since then was viewed in the US as a very important one. However, in 2002 a lot of universities still did not have intellectual right policies (Van Dusen, 2013). Later, the importance of avoiding plagiarism has been emphasized all over the world.

Add to this the growing number of recent scandals involving people with political, business, and educational standing who were involved in dishonest academic practices (Bailey, 2017). So, it is only natural that copyright and plagiarism issues are getting in the focus of everybody's attention nowadays.

Literature review

Definition

Moulton (2001) mentions that if words and ideas like physical objects were ordinary property, there would be nothing wrong in buying and selling them. In fact, with intellectual property it is different. Buying / selling / stealing

intellectual property and presenting it as one's own is viewed as either just unethical or even illegal and punishable by law. On the other hand, intellectual property is a kind of property and grabbing it is a violation of human rights which should be punished (Shahabuddin, 2009).

Many cases of authors (writers, musicians, painters, etc.) purposefully "reading, rewriting, alluding to, parodying, and saluting each other" (Burstein, 2006), mentioning or not mentioning each other (to make their readers move their brains) are known, including such great names as Shakespeare, Joyce, Paganini and others. Were they plagiarists? In literary and art criticism the term 'intertextuality' is more common to discuss such cases, to emphasize the cultural inheritance, however, nowadays some artists do win court cases dealing with copyright.

In science, compared to art and literature, one either builds up upon the existing research (one's own or somebody else's) and develops it further (then it has to be mentioned) in order to come to new ideas or expresses original ideas. An effort to present somebody else's ideas as one's own is definitely inappropriate. To answer the question when using other research is plagiarism (if a definite answer to such a delicate question always exists), we need to know a clear definition of plagiarism.

First of all, we need to distinguish plagiarism from two other related and partially overlapping concepts: violation of copyright and cheating, as the three are sometimes confusingly used in research literature. Betts et al. (2012), for instance, merge the concepts by saying that "from a *legal* perspective plagiarism is regarded as a *violation of intellectual property* rights that are protected by copyright laws" (p. 74). Nicholls and Feal (2009), vice versa, separate from each other copyright (a legal respect of academic behaviour) and plagiarism (its ethical and moral respect).

According to Copyright Law of the United States (Copyright Office, 2016, 3), compilation and derivative work is not illegal. A fixed work has an owner and all reproductions and applications can be done only upon the owner's permission. Nobody can make financial gain on a copyrighted work except the owner, but for the purposes of criticism and research it can be reproduced. Violation of copyright is legally punishable (by fines).

Cheating is defined as "depriving of something valuable by the use of deceit or fraud" (Merriam-Webster Dictionary, n.d.). Cheating in education is normally defined as "any action that violates the established rules governing the administration of a test or the completion of an assignment" (Cizek, 1999, 3). More detailed definitions are beyond the scope of legislation and are usually given in codes of ethics of educational institutions, with punishments such as getting a zero score, failing the subject and even expulsion from the institution.

There are many definitions of plagiarism, largely similar to each other, but still emphasizing on various to a certain degree characteristics. Some other academic misconduct (falsification and fabrication of data) is viewed either together with plagiarism or as its aspects (Tayan, 2017). We made up table 1 which shows which source (research and administrative) includes which characteristic in order to sum up and get a working definition for this research.

Table 1. Features of plagiarism

Author/characteristic	Copying someone else's work or piece of work	Using another author's ideas without reference	Depriving authors of profit	No appropriate acknowledgement of using	Getting author's consent for mentioning the work	Violation of property rights	Self-plagiarism	Quoting without properly referring to the author	Paraphrasing without properly crediting the author	Falsification and fabrication of data	Intentionally copying ideas, results or words
Beller & DuPre 2009	x	x									
Bolkan 2016	x										
Colnerud & Rosander 2009	x	x					x			x	x
Doss et al. 2016								x	x		
Halupa 2014							x				
Hard, Conway, & Moran 2006	x	x									
Hayes & Introna 2006	x			x							
Japanese Ministry of Education, Culture, Sports, Science and Technology 2006 (Teeter 2015)	x	x			x						
Moulton & Robinson 2002			x								
Nelson Poynter Memorial Library n.d.				x		x					
Shahabuddin 2009		x									
Tayan 2017										x	
U.S. Department of Health and Human Services 2005	x	x		x							x
Wang 2008	x	x									
Wilkinson 2009										x	

Moulton and Robinson (2002) include the aspect of gained / lost financial profit as an aspect of plagiarism, thus equating it to violation of copyright. Some authors, also viewing the issue rather legally than ethically, believe that legally (and, probably, ethically) it is impossible to speak about plagiarism or self-plagiarism of a work that was not published and / or copyrighted (Bennett, Behrendt, and Boothby, 2011; Bird, 2002; Halupa, 2014). Can we view a student essay as 'published' if it was submitted to get a grade? Can, correspondingly, a student be failed in a course

or a task, if such double submission is discovered? Such cases are not regulated by law, but may / should be regulated by university codes of ethics. The word “fixed” in this case is much more exact than “published” and would remove all questions.

What about authors citing themselves? Unless the researcher is already a recognized scholar, it is viewed as a bad tone. On the other hand, what can students do if they need to refer to their earlier done research, because the new work is its continuation? Will they be blamed of self-plagiarism if they do not refer to that research? Due to many controversies regarding self-plagiarism, some famous universities such as Stanford and Purdue have no self-plagiarism issue in the code of ethics, while others, such as Harvard, do. Harvard university views any copied work as plagiarism and unacceptable, while an incorporated work not as plagiarism and, correspondingly, acceptable (Halupa, 2014).

To fight with plagiarism in higher education, the definition of the term is essential. However, the Law of Georgia on Higher Education (2004), for instance, does not even involve a definition of plagiarism, thus, leaving the issue completely to the universities’ regulations, while National Center for Education Quality Enhancement is very keen on anti-plagiarism policies of each university. This approach does not look like fruitful, as it permits subjectivity and even corruption while assessing student work, professors’ qualification and educational institution’s authorization / accreditation.

On their initiative, Open Society Georgia Foundation, together with ERASMUS + Office in 2015-2016 studied the state of academic dishonesty practices in Georgia and published a report of a study involving above 1,500 students, academic personnel and administrators (Bakradze et al., 2016) and recommendations for the improvement of situation (Open Society Georgia Foundation, together with ERASMUS + Office, 2016).

As neither the Law on HE, nor the NCEQE provide a clear definition (however, a person caught at plagiarism in a Master thesis / Doctoral dissertation during the defense procedure or after it is expected to be deprived of the degree), universities need detailed codes of ethics to preview all possible cases of plagiarism and punishment measures against each. The project INTEGRITY of Ilia State University, involving 12 state universities financed by ERASMUS + and CBHE (Capacity Building in the Field of higher Education), won a 856,834-euro grant in August 2017, to improve the situation with academic honesty in the country (Ilia State University 2017). We view this project as a very important one. However, there are too many universities in Georgia (especially, private ones), which are not involved in the project, which is a pity. Such a project should (at least on some event level) has to involve all Georgian universities.

Less dramatic consequences of discovering (self-)plagiarism in publications include being put on the blacklist by the journal / publishing house (Shahabuddin, 2009). However, this can become a grave barrier to the author’s academic career.

Unfortunately, as it is easier to discover and prove, too much emphasis is contemporary research and practice is laid on the wording of another author’s work (if it is not a quotation, but is referred to, basic paraphrasing,

including the structure of the sentence has to be involved), and too little attention is paid to using another person's ideas, probably, as it is a grey area difficult to either prove or disprove. Among the authors whose works dealing with plagiarism we analyzed, only one (Shahabuddin, 2009) mentioned stealing and using another person's *ideas* as one's own. Brabazon (2015) also mentions too much teacher and administration emphasis on the percentage of verbatim similarity instead of evaluating new ideas (or their absence) in student work. This is mostly because there is no easy and fast way to detect plagiarizing the ideas.

For us personally the demand to either quote or paraphrase heavily is doubtful. Quoting (with adequate information on the resource) is, of course, a logical demand. But all authors know that their paper, even its literature review part, cannot consist mostly of quotations (the similarity level will be too high, although there is nothing illegal in quoting). But what is wrong if the researcher mentions the resource in the correct way, but does only a little paraphrasing? What sort of dishonesty is involved here? Had it been an effort to steal, there would have been no reference at all. Is a research paper an exercise in exquisite English (or whichever language it is written in) or original analysis and coming to novel conclusions? It looks like the researcher has to heavily paraphrase just in order not to be caught in similarity by a plagiarism detection services - PDSs - and then not to have to prove that this is not plagiarism. We are sort of becoming slaves of the machines we have invented. We believe researchers can use their time and brain on things more useful than just heavy paraphrasing. This is one of the research questions we are going to ask in the article.

The issue of intentional / unintentional copying mentioned by both researchers (Eaton et al., 2017; Greenberger et al., 2016; Shahabuddin, 2009) and administrators (Teeter, 2015; US Department of Health and Human Services, 2005) is essential for students, as working in the direction of its prevention is more important than punishment, while for degree holders it is expected that they have to observe academic honesty. Cases of knowingly violating copyright are taken to law court and, if proved, punished legally. Cases of plagiarism, even if punishable / punished by university regulation, may be appealed to court and the administrative decision may be removed. However, a noisy court case, even if the person is not found guilty, will spoil his/her reputation and career.

Thus, while issues of copyright are punishable financially by court decisions according to copyright legislations, issues of plagiarism are punishable administratively by educational institutions according to their regulations, however, in some cases court may be addressed to remove the punishment. On the other hand, cheating is a term mostly used for other than plagiarism kinds of learning dishonesty. Cheating more often deals with testing procedures while plagiarism - with essays and research papers / theses. It is also punishable administratively by educational institutions according to their regulations.

Based on the analysis above, we can say that plagiarism is

- a legal issue (let lawyers at ministries deal with it and provide improved legislation and lawyers at universities develop better university regulations)

- an ethical issue (let lawyers involve academic personnel and students in developing the university regulations)
- an administrative issue (punishment realization, providing academic support)
- a pedagogical issue (teaching to write papers in a way to avoid plagiarism, developing original critical and analytical thinking – let academics do it).

Although the majority of researchers and administrators only mention copying other people's words and stealing other people's ideas without adequate citation / referencing as plagiarism, we would rather enumerate what makes up "adequate citation / referencing" (complete information about the source, according to the required citation style, and paraphrasing for referencing and exact text, inverted comas, referencing and page number for quotation). We would also add to it the author's permission for long quotations, double submission of one's own work fixed / publicized in some form (such as submitting to the lecturer to get the grade), however, we would exclude from the list the articles including dissertation results, published preceding defense. We would not demand heavy paraphrasing in the requirements, as it may change the author's initial idea. Falsification of results is definitely part of academic dishonesty, but not part of plagiarism.

What types of plagiarism exist?

It is important to keep in mind that plagiarism is a multifaceted phenomenon, and each its type should be treated differently. It is also essential to realize that technical mistakes in a couple of references is not as grave as copying a whole article from somebody, not giving the author's name or buying an article from 'paper mills'. In the first case there will be simply a requirement to improve the referencing, while in the second losing the degree will probably follow.

Burg et al. (2007) name two broad types: wholesale plagiarism (submitting somebody's complete work as one's own) and mosaic plagiarism (using words / concepts and ideas /approach /research methods without providing quotation / referencing). Vij et al. (2009) classify plagiarism as:

- Complete plagiarism (whole work was plagiarized from one or few sources – has to be punished very strictly);
- "Copy and paste" – using information from digital sources (has to be punished strictly);
- Word-switch – copying parts of various works with minor changes (needs explanations and practice on referencing);
- Self-plagiarism (has to be punished if no change or new data was applied, when submitted for assessment) (needs explanations and practice on referencing).

Some authors also mention:

- Unintentional plagiarism (Belter and DuPre, 2009; Colnerud and Rosander, 2009; Eaton, 2017) (needs explanations and practice on referencing),
- Patchwriting (Howard, 1992) – using a piece from one work and a piece from another, omitting and adding a few words as well as a little paraphrasing (substituting a couple of words by their synonyms), with or without adequate citation. This kind of writing is not original and might (when accompanied by referencing) be acceptable only in literature reviews. However, even there it requires analysis, critical assessment and summarizing, not just retelling different authors' views. Wilkinson (2009), for instance, believes patchwriting to be rather a study strategy than plagiarism. Pennycook (1996) justifies patchwriting in foreign language teaching as a way to master good samples of language.

Thus, plagiarism should be treated proportionately to its type – an explanation, warning and grade decrease, cancelation of the grade and degree.

Who plagiarizes?

Although most research is concerned with students' plagiarism, academic personnel also commits plagiarism, however, most research deals with students' cases (Balbuena and Lamela, 2015; Betts, Bostock, Elder, and Trueman, 2012; Halupa, 2014; Price and Price, 2005), while quite few – with academic staff's cases (Shahabuddin, 2009). However, the issue of plagiarism and self-plagiarism of teachers is essential, as teachers who commit acts of plagiarism cannot serve a good example to students, even if in words they tell students not to plagiarize.

Online students, due to distance with teachers, tend to plagiarize more often than students in traditional environment (Greenberger et al., 2016). Students from collectivist cultures, as well as students from countries where for a long time it was not very welcomed to express one's original ideas will tend to plagiarize more often than in cultures where individual contribution has always been valued (Bakradze et al., 2016; Connolly, 2009; McCabe, Feghali, and Abdallah, 2008). The situation in these cultures is changing nowadays due to globalization and in no culture any more plagiarism is viewed as acceptable, however, the traditions do have some impact on the practice (Teeter, 2015).

According to some researches (Hayes and Introna, 2005; Keck, 2006; Mundava and Chaudhuri, 2007), students whose native language is other than education language, due to the lower level of language proficiency, tend to plagiarize more often than native speaker students, as they lack paraphrasing skills, however, other researches express doubt concerning this difference as language skills may be poor with native speakers as well (Bailey and Challen, 2015).

Other researchers say that online vs. in-person regime, culture, studying in a non-native language is not the reason, but students' goal motivations are (performance and performance-avoidance students often plagiarize, while mastery-goal-oriented students do not) (Sicak and Arslan, 2016; Teeter, 2015). This is why, to their mind, the

correlation between the learning format, student's culture and native language, on the one hand, and the plagiarism rates is not high in the above researches.

Why do they plagiarize?

We tried to summarize the reasons that trigger students and academic staff to plagiarize:

- the ease of plagiarizing with technologies (Greenberger et al., 2016); abundant free internet content causing illusion that all internet resources are free (Evering and Moorman, 2012);
- lack of clear-cut plagiarism policy (Gilmore et al., 2010; Halupa and Bollinger, 2013);
- the difficulty of developing an original idea (Girard, 2004);
- lack of: (not only second, but also first) language and writing skills, experience of independent work, confidence (Eaton et al., 2017; Greenberger et al., 2016; Wang et al., 2013; Wheeler, 2009) and experience in academic writing (Pitchford, 2012; Wilkinson, 2009); the difficulty of the task (Wilkinson, 2009; Balbuena and Lamela, 2015);
- the belief that students / academic staff cannot say it better than the author (Bailey and Challen, 2015; Bolkan, 2006);
- lack of attention and forgetfulness while writing (Greenberger et al., 2016);
- false belief that abundant references / citations will impress the assessor (Bailey and Challen, 2015);
- lack of time (due to tough deadlines, too heavy load, other occupations) (Bailey and Challen, 2015; Balbuena and Lamela, 2015);
- low level of academic support and understanding of the process of academic writing (Emerson, Rees, and McKay, 2005);
- no PDS at university available for students and academic staff; lack of skills using it (Anney and Mosha, 2015);
- attitude towards the writing assignment / the need to publish as a waste of time; attitude towards plagiarism as unimportant (Pitchford, 2012; Wilkinson, 2009);
- hope that plagiarism will not be discovered (as it is time-consuming to check) (Betts et al., 2012; Eaton et al., 2017; Greenberger et al., 2016);
- laziness (Eaton et al., 2017; Wang et al., 2013);
- problems with time management (procrastination) (Eaton et al., 2017; Starovoytova and Namango, 2016);
- following professors' negative examples (Eaton et al., 2017; Shahabuddin, 2009);

- fear of failing the task / course (Balbuena and Lamela, 2015; Wilkinson, 2009);
- parents' pressure not to fail (Betts et al., 2012);
- abundance of take-home assessed assignments, the process of fulfilment of which the teacher cannot control (Anney and Mosha, 2015);
- summative assessment only is used (Anney and Mosha, 2015).
- the pressure to publish in order to get and/or maintain an academic position, to promote one's career and to get research grants (Shahabuddin, 2009);

Preventing plagiarism

As Bolkan (2006) mentions, there are three aspects of dealing with plagiarism: prevention, detection and punishment. Brabazon (2015, 14) righteously emphasizes that rigorous fighting with plagiarism creates "a culture of blame, shame, judgement and ridicule". Unfortunately, some universities even do not take the trouble to detect it, while most of universities who do, only punish students for plagiarism, instead of preventing it. Experience shows that explaining what is plagiarism is important but not sufficient. Students need to be facilitated and trained not to plagiarize unintentionally. One of the ways is to practice paraphrasing, citing and referencing (Holt, 2012; Walker, 2008). At Master's and Doctoral level students' ability to paraphrase is tightly linked with their ability to summarize long pieces of information and to critically analyze them (i.e., find similarity and difference between the expressed ideas and arguments).

It is essential to teach students to avoid plagiarism as well as to present to them why they need to do so (Anson, 2011). Students need to understand that being caught and punished for plagiarism is only one threat, while spoiling one's and the institution's reputation, not developing as professionals (not gaining deep knowledge, critical thinking skills, etc.) and, correspondingly, not being able to contribute to the development of the company and the whole country are other, very important reasons. When copy-pasting, they usually do not accompany it by learning (Pitchford, 2012). Wang et al (2013) mention that plagiarism reduces learning outcomes. This should be brought to students' minds.

Detecting plagiarism

Plagiarism detection has little to do with teaching and much - with administration (Brabazon, 2015, 17). At a university as an educational institution first of all teachers should keep in mind that assessing for plagiarism should occur only after having clear academic honesty policies at the university and holding detailed and sufficient student training of relevant referencing. For assessors who do not have access to antiplagiarism software, checking with Google of at random sentences in the paper (or maybe the ones which seem suspicious) is the simplest way. It does

not guarantee zero / low-level similarity to existing texts, but is often effective enough. The combination of intuitive seeking with Google search even helps to detect some cases of plagiarism not detected by PDSs at universities (Evans, 2006). Bolkan (2006) recommends to inform students that their papers will be checked for plagiarism, but not to inform them with which software they will do it, so that they do not find a way how to trick the program. This approach does not look too respectful of students, besides, the tricking ways are more or less the same for all programs.

There is various antiplagiarism software on the market, beginning from free programs on the internet, ending with expensive and highly professional programs like Turnitin. The software was developed by John Barrie of University of Berkley, California (Turnitin, 2011). Their quality first of all depends on the amount of electronic resources that the program can compare to the submitted copy.

Punishing for plagiarism

An important respect of punishment for plagiarism is an answer to the question who suffers from using plagiarism. These, according to Doss et al. (2016), are:

- the person whose work was plagiarized (loses benefits);
- the person who plagiarizes (may copy + paste a low quality piece and fail the task even without being caught at plagiarizing; his / her professional level as result does not satisfy the standards);
- the organization where the case occurred (if discovered by other organizations / people, the organization's image, its good name suffers);
- the whole country, as dishonest academic behavior is a grave obstacle for its development.

So, as plagiarism has grave consequences, it definitely should be punished. However, it is important to discriminate between freshman students, at one extreme, and academicians with position, at the other. As already mentioned, students may not have been taught about plagiarism and trained to avoid it. Or even, if taught and trained a bit, they may have little experience of dealing with it. In that case a warning accompanied by explanation may be enough, next may come reduction in points and only finally zero points and failing the task / course. Academic personnel (especially, the older generation, who were not trained to avoid plagiarism as part of their education) also needs being well informed about plagiarism and provided training in avoiding it. After that they should be strictly punished for cases of plagiarism.

There are some cases when self-duplication should not, to our mind, be viewed as self-plagiarism. Some doctoral programs have a pre-condition of being admitted to defense - to publish the main research results (such is the case in our university). It would be very strange to demand to paraphrase the article in the dissertation, but, unless paraphrased, it may be viewed as self-plagiarism, which would be too unfair.

Anti-plagiarism software: advantages, disadvantages and application

The times when the teacher / supervisor / reviewer could know all publications on the topic are far behind nowadays. Luckily, not only writers can 'benefit' from contemporary technologies, but also assessors can use them to discover similarity between the existing texts and the submitted for assessment paper. Anti-plagiarism software, such as Turnitin (according to Pitchford [2012], about 80% of UK universities are using it), can be used to quickly discover such similarities. It will compare the texts reachable for the program on the internet and/or the university base to the submitted paper. As mentioned, the more texts are available for the software, the better checking it can provide. However, it marks as similarity cases those quotations which are done correctly as well. Besides, it cannot compare the submitted text to the texts existing only on-paper or translations from other languages, so it is not an ideal judge of originality. The Bailey and Challen (2015) study, for instance, has revealed that twenty one out of fifty-two respondents answered that Turnitin did not discover all plagiarized works. On the other hand, the percentage shown by Turnitin and similar software does reflect the abuse of quotation (thus, revealing the lack of original thought in the paper (Bailey and Challen, 2015).

Some universities use internal systems of plagiarism detection: only works submitted within the university are in the base and they are compared to each other for originality, in order to avoid two situations: a student double-submits the same paper to fulfil the requirements of various courses or a student copies another student's paper. This is definitely not enough, especially for theses and dissertations. The software, that is using open internet-resources, makes the search wider, but does not cover unpublished and coded works. A combination of the two above-mentioned types of bases might be more efficient (Butakov, Dyagilev and Tskhay, 2012).

Some teachers and especially administrators hope that using a PDS will solve all problems dealing with the detection of plagiarism, but they are wrong. Turnitin originality report is not plagiarism report. First of all, such programs help discover all 5 or 6 consequent word coincidences, which may convey general truths (e.g., 'teaching grammar is important for language teaching'), which is certainly not plagiarism. Then, a student may not have used the source (including Wikipedia, which is horribly forbidden as a non-academic source), but the source that these unreliable cites have used, too. One should not blame the student for what s/he has not done (Bailey and Challen, 2015). To be sure whether the coincidence (not referenced at all or not referenced adequately) is a case of plagiarism, the assessor has to go through all detected cases one by one and decide on their nature, which is time-consuming and subjective in some cases, as originality respects require interpretation (Betts et al., 2012). But otherwise researcher's rights (presumption of innocence) will be violated.

As mentioned above, anti-plagiarism software should be basically used as a learning tool (teaching how to avoid wrong referencing / citation) and not as a punitive device (Auer and Krupar, 2001; Carroll, 2007; Eaton et al., 2017; Park, 2003; Pitchford, 2012). In that case both teachers and students should be trained to use the software.

Brabazon (2015) mentions that it is a wrong way to start the very first meeting with student with talking about punishments that await for them in case they commit plagiarism. This creates a wrong climate in the classroom / institution.

According to Bailey and Challen (2015), some students assess the application of Turnitin at their university as causing stress, fear of failure and even panic (19 out of 52 respondents), confusion (five answers), while others (17 answers) as providing self-confidence to them. Some students and teachers, however, mention that using antiplagiarism software as a learning tool, instead of teaching them to write original papers, teaches them how to plagiarize in a way not to be caught.

Some students view antiplagiarism software application as violation of their rights (Foster, 2002). They say that, when they submit their work for plagiarism detection, it can be preserved in the system and further used for selling. According to some students, there are PDSs that report on coincidence only in publication of their competitors' bases, but not in their own (Bolkan, 2006).

Jamieson and Howard (2011, 4) mention that many students, to provide citations, are "not engaging in meaningful ways, but cherry-picking useful sections". To teach students to cite meaningfully and to use quotations only when really needed (when what is said cannot be said better) is very important for teaching good academic writing, not simply for avoiding plagiarism.

Among the measures suggested by Eaton et al. (2017) are:

- while teaching academic writing and research skills, while asking students to write essay, reports, etc., focus on academic integrity rather than on punishment;
- shifting from summative to formative assessment in academic writing (see the process, not only the product: ask to produce outlines, draft papers, peer reviews and step-by-step improvements) (see also Bolkan [2006]; Price and Price [2005]);
- requiring to use more than one source;
- involving discussion of the paper (see also Bolkan, [2006]);
- using in-class writing (see also Anney and Mosha [2015]);
- explaining not only *how* to reference, but also *why* to do so.

Brabazon (2015) recommends to teach students strategies of writing, especially academic writing and to scaffold them in class on finding scholarly articles on the topic of their research, writing the plan and following / modifying it, referencing and quoting, self- and peer-editing, taking into consideration peer and teacher feedback. On the other hand, students, Brabazon mentions, too often just care about getting the tick for submitting the draft / paper and do not react to teacher's / supervisor's feedback. It is essential to be sure that they got the message

and reacted to it adequately, otherwise students are wasting their time submitting new and new drafts and teachers are wasting theirs giving the same comments again and again.

Balbuena and Lamela (2015) recommend to require from students to use articles and dissertations rather than course books and reviews for references of research papers and theses / dissertations. Bolkan (2006) suggests offering unique tasks with narrow topics for essay not to enable students copy readymade papers from the internet. Halupa (2014) recommends to provide a curriculum which does not involve overlap of topics and tasks (which would provoke students to reuse their already submitted work). If teachers want their students to write in an honest way, the given assignments should vary from year to year, they should require interpretation, creativity, innovation and originality instead of enumeration of facts and opinions.

Research Method

We used **quantitative** research method - survey (questionnaire containing items to be assessed in a 5-point Likert scale), as it is objective, permits to apply data analysis and generalize the results, also as the questionnaire can be replicated for the future application.

This research in this article is trying to answer the following **research questions**:

1. When should universities start teaching students about plagiarism (to be answered by items 1 and 2 in the questionnaire)?
2. Are students, academic staff and assessors in Georgia well aware of the term / concept "plagiarism" (items 3-6) and its importance (items 7-8)?
3. Does plagiarism deal with words rather than ideas (items 11-12)?
4. What are university students' and academic staff's in Georgia typical attitudes/behaviors concerning plagiarism (items 9-10; 14-15, 18, 31-32)?
5. Why do students and academic staff in Georgia plagiarize (items 13, 16-17, 19)?
6. Why is plagiarism harmful (items 20, 36-38)?
7. Do students and academic staff in Georgia perceive plagiarism as a grave problem (items 23, 25-28)?
8. What is viewed as more important in Georgia now – to prevent or to punish for plagiarism (items 29, 33, 40-41)?
9. How should be PDSs applied (items 34-35, 39)?

Tools

The student **questionnaire** in Doss et al. (2016) was partly used and modified to measure students' / academic personnel's and assessors' (people who often assess students' and researchers' works as reviewers and editors) attitudes towards various respects of plagiarism. Some items were added to it, based on the literature review above. The developed questionnaire involved 42 items to be assessed in a 5-point Likert scale and one open-ended question (respondents making their comments). The link to the Google forms (separately for students, academic personnel and assessors of research papers – scientific journal editors, members of dissertation boards) were placed on social media for a month.

All three variants of the questionnaire contained same items, some of them reformulated for academic personnel and assessors, e.g.:

If a work (mine/somebody else's) wasn't published, I can present it as new / mine. → If a work (mine/somebody else's) wasn't published, students / academic personnel members may present it as new / theirs.

Participants

Table 2 contains the demographic information about the participants who came from state and private universities in the capital of Georgia as well as from the regions. This composition of the respondents enables us to draw certain conclusions about the nationwide situation.

Table 2. Respondents' demographic data

category	students	academic personnel	assessors	universities
number of participants	46	52	30	8 (6 state & 2 private; 3 in the capital, 5 in regions)

Of course, the **limitation** of this study deals with the number of participant students, lecturers and assessors, however, the number of universities is quite representative (8 out of 75 authorized universities in Georgia), thus, certain generalizations of results still can be made. Generally – unfortunately – students are interested in the issue only if/when they are punished for plagiarism, and this is a big problem. Besides this research, based on literature analysis in this article, we held at our university a seminar for Master and Doctoral students (only 8 out of about a hundred attended) and lecturers (20 out of about 40 attended), which shows lack of their interest in the issue. We sent the presentation slides to all of them, attending or not, hoping they will apply the information in their studies / work.

Results and discussion

The further tables contain the number and the percentage of answers “3” (rather agree) and “4” (completely agree) to the questionnaire items when the expected answers are positive, and “0” and “1” – when the expected answers are negative.

The results in table 3 reveal that the opinions of the students split approximately half to half (47.8%; $M=3.8$, $SD=0.4$) think that issues of academic honesty should be taught starting with bachelor studies and 52.2% ($M=2.5$; $SD=1.3$) - with master studies, there is nobody who denied this need at both levels (the results here and below are rounded to decimals). Even fewer academic personnel (46.2%, $M=3.8$, $SD=0.4$) think that teaching about plagiarism should start at bachelor level. The opinion of the assessors on this issue split 50/50% ($M=3.7$; $SD=0.5$ – at BA and $M=2.5$; $SD=1.4$ – at MA level). This is largely related to the fact that plagiarism in Georgia is associated with writing articles, theses and dissertations and not with any sort of independent written items. This attitude, of course, has to be changed.

Table 3. Starting teaching students about plagiarism (items 1 and 2 in the questionnaire).

	students	academic personnel	assessors
At BA	47.8% ($M=3.7826$, $SD=0.41703$)	46.2% ($M=3.8462$, $SD=0.36432$)	50% ($M=3.7$; $SD=0.46609$)
At MA	52.2% ($M=2.5217$; $SD=1.29510$)	53.8% ($M=2.5769$; $SD=1.2586$)	50% ($M=2.5$; $SD=1.38340$)

As in table 4, the majority of the teachers (80.8%; $M=2.7$, $SD=1.3$) and the students (60.8%; $M=2.3$, $SD=1.5$) as well as all assessors (100%; $M=3.4$, $SD=0.5$) agree that issues of plagiarism began to be emphasized in Georgia in the last decade, which is the reality. But still not all are aware and the teachers are better aware than the students (the assessors are aware).

Items 4-5 and 7-9 offered inadequate (not exact) definitions (equating plagiarism to cheating and copyright violation). We can see that the students, the lecturers and the assessors are not well aware of the difference among the related terms – only 3.8% ($2.9 < M < 3.6$, $0.8 < SD < 0.9$), 11.6% ($1.7 < M < 3.3$, $0.7 < SD < 1.5$) and 30% ($M=2.8$, $SD=1.0$), consequently, of adequate answers were given.

The majority of the students (82.6%; $M=3.6$, $SD=0.9$) and more than half of the lecturers (57.7%; $M=2.1$, $SD=1.2$) state that their university has a clearly enough definition of plagiarism, the others are either unaware (unfortunately, not to check the university web-gate for information is rather typical for Georgia) or deny it (4.3% of the students and the 7.7% of lecturers). This or that way, the situation is not good enough. It is even worse for the assessors only 40% ($M=2.1$, $SD=1.2$) of whom state that their university has a clear plagiarism policy, while 30% deny it and 30% are unaware (assessors definitely have to be aware, otherwise how do they assess others' works).

4.3% of the students answered that getting a grade is more important for them than being academically honest, so grades have a greater value for them than honesty. These numbers in reality may be higher, as few (if any) lazy and dishonest students, most probably, participated in the survey. The majority answered they are not

(M=3.6087, SD=0.88137). This view of students and/or researchers is supported by 84.7% of the teachers (M=3.8, SD=0.5) and 60% of the researchers ((M=2.8, SD=0.4). The last number is especially unpleasant, as they have dealt with the situation practically.

Table 4. Awareness of the definition of the concept ‘plagiarism’ (items 3-6) and its importance (items 7-8)

	students	academic personnel	assessors
issues of plagiarism emphasized in Georgia in the last decade	60.8% (M=2.3043, SD=1.50362)	80.8% (M=2.7308, SD1=1.26979)	100% (M=3.4, SD=0.49827)
inadequate answers/ /no answers	91.3%/4.9% (M1=3.5652, SD1=0.77895; M2=3.3913, SD2=0.93043; M3=3.6087, SD3=0.88137; M4=2.8696, SD.4=1.00241)	84.6%/3.8% (M1=3.3462; SD1=0.73790; M2=2.7692, SD2=1.16510; M3=1.8462, SD3=1.21081; M4=2.1923, SD4=1.50865;	70%/0% (M1=2.8, SD1=0.99665; M2=2.8, SD2=0.99655; M3=2.1923, SD3=1.50865; M4=1.9, SD4=1/061188)
clearly defined plagiarism definition and policies at my university	82.7% (M=3.6087, SD=0.88137)	57.7% (M=2.1, SD=.1.15520)	40% (M=2.1, SD=1.15520)
honesty is more important than awards	82.7% (M=3.6087, SD=0.88137)	84.7% (M=3.8462, SD=0.45962)	60% (M=2.8333, SD=0.38348)

Table 5 reveals that all three groups of respondents – the lecturers (80.6/77%), the students (65.2/73.9%) and the assessors (90/80%) believe that stealing words is more emphasized nowadays than stealing ideas as the latter is difficult to discover and prove ($2.6 < M < 3.2$; $0.7 < SD < 1.4$). Hopefully, in the future stealing ideas will be more emphasized.

Table 5. Difficulty of detecting plagiarizing ideas (compared to words) (items 11 and12)

	students	academic personnel	assessors
stealing ideas is more difficult to prove,	65.2% (M=2.7826; SD=0.89226)	80.6% (M=2.8077, SD=0.79307)	90% (M=3.2, SD=0.8868)
thus, is not emphasized	73.9% (M=2.5852; SD=1.18607)	77% (M=3.1538; SD=0.72449)	80% (M=3.1; SD=1.39827)

According to table 6, the majority of the respondents (83.6-100%) quite unanimously view presenting another person’s ideas without mentioning the author as impossible ($0 < M < 0.6$; $0.3 < SD < 1$), which is good. However, 56.5-58.8% of the students, 34.6-61.5% of the academic personnel and 20-70% of the assessor respondents, depending on how the question is formulated, view second submission of the same (unpublished) work as normal. It means they do not understand well enough what is plagiarism ($0.8 < SD < 1.2$).

The majority of the respondents in all three groups – the students (69.5%), the lecturers (80.8%) and the assessors (90%) - do not view insufficiently paraphrased sentences as plagiarism ($2.9 < M < 3.3$, $0.6 < SD < 1.0$). This is the idea expressed by us earlier in this article, but at the moment an author is punished for such cases as for plagiarism. Probably, this article, at least a little, helps to initiate debate on the issue. The existing approach to this case, to our mind, is formalistic and emphasizing paraphrasing skills, not really academic honesty.

It is good that the majority of the respondents recognize that using other people's ideas without referencing is plagiarism, still it is not too good that not all respondents think so.

Many of the students (21.7%, $M=2.7$, $SD=0.9$) and some of the teachers (3.8%, $M=1.3$, $SD=0.6$) and the assessors (10%, $M=1.4$, $SD=0.7$) think that copying from a friend upon his/her permission is not plagiarism, as permission has been obtained. This is, certainly, a wrong view which has to be changed.

The students do not yet possess sufficient academic writing skills, so they think they can be excused for using others' words to write better (43.5%, $M=2.1$, $SD=1.2$). This is in agreement of the above-stated need to train students in order not to provoke them to plagiarize (Anson 2011; Greenberger et al. 2016; Holt 2012; Pecorari 2003; Walker 2008; Wheeler 2009). It is surprising enough that more than a third (34.6%, $M=1.9$, $SD=1.0$) of the lecturers and the assessors (40%, $M=2.0$, $SD=1.2$) admit the same, which also entails either their dishonesty or low research (academic writing) qualification or probably both. Thus, not only students, but also academic staff in Georgia need to be trained not to commit plagiarism.

Many of the students (26.0%; $M=2.0$, $SD=0.9$), teachers (38.4%, $M=1.9$, $SD=1.0$) and assessors (30%, $M=2.2$, $SD=0.6$) believe that in oral speech there is no need to mention the references. It is true that it is sort of awkward to mention the references in an oral speech/presentation, but at least the really original ideas' authors have to be mentioned in them. So, this misunderstanding has to be worked on.

Few of the students (13%, $M=1.3$, $SD=0.9$) and lecturers (3.8%, $M=1.3$, $SD=0.7$) admit that they sometimes translate other people's ideas and present them as their own, while half of the assessors (50%, $M=2.5$, $SD=1.2$) did the same. Frankly, the significant difference in answers is surprising, so the answers of the first two or the last group seem unreliable.

It is very good that the respondents quite unanimously emphasize the importance of prevention of plagiarism (91.1% of the students, ($M=3.6$, $SD=0.9$); 100% of the teachers, $M=3.8$, $SD=0.4$, and 90% of the assessors, $M=3.0$, $SD=0.8$). However, these answers are in conflict with their answers on the central role of punishment, so either of the answers is not too reliable.

About a third of all respondents confirm that plagiarism is typical for Georgian 'culture': 34.7% of the students ($M=2.0$, $SD=1.3$), 30.7% of the teachers ($M=2.0$, $SD=1.0$) and 30% of the assessors ($M=2.1$, $SD=0.7$) think so. The fact is a sad one. It has to be urgently tackled with, if the country needs an honest name in research.

Table 6. University students' and academic staff's typical attitudes / behaviors concerning plagiarism (items 9, 10, 14-15, 21-22, 24, 30-32)

approval of normally not approved behaviours	students	academic personnel	assessors
no referencing	14.4% (M=0.6087, SD=0.9703)	17.4% (M=0.3077; SD=0.67267)	0% (M=0.1000; SD=0.30513)
unpublished earlier work presented as new	56.5-58.8% (M1=2.5217, SD1=1.1870; M2=2.5652, SD2=1.18607)	34.6-61.5% (M1=2.5, SD1=0.93934; M2=1.9212, SD2=1.12092)	20-70% (M1=2.4828, SD1=0.82897; M2=2.1034, SD2=0.85960)
insufficiently paraphrased (author and work in the references) is not plagiarism	69.5% (M=2.8696, SD=1.00241)	80.8% (M=3.1538, SD5=0.99773)	90% (M=3.3, SD5=0.65126)
copying from a friend if s/he permitted	21.7% (M=2.7174, SD=0.88602)	3.8% (M=1.3462, SD=0.55606)	10% (M=1.4, SD=0.67466)
using other people's words (copied) as inspiration	43.5% (M=2.1304, SD=1.16636)	34.6% (M=1.8846, SD=0.98327)	40% (M=2.0, SD=1.20344)
using other people's ideas in speaking is ok	26.0% (M=1.9565, SD=0.91788)	38.4% (M=1.8846, SD=1.02237)	30% (M=2.2, SD=0.61026)
translating other people's ideas without referencing	13% (M=1.2609, SD=0.90516)	3.8% (M=1.3462, SD=0.68269)	50% (M=2.5, SD=1.22474)
emphasis on prevention of plagiarism	91.1% (M=3.5652, SD=0.88574)	100% (3.7692, SD=0.42544)	90% (M=3.0, SD=0.78784)
plagiarism is typical for Georgia	34.7% (M=2.0435, SD=1.31583)	30.7% (M=2.0385, SD=1.02826)	30% (M=2.1, SD=0.71197)

In table 7 we see that the students (17.4%, M=1.3, SD=1.0) and academic staff (19.2%, M=1.7, SD=0.9) mentioned the lack of language skills as the main reason of plagiarism behavior (0% of the assessors positively assesses the item, M=1.3, SD=0.5), while the assessors (90%, M=3.4, SD=0.7) – lack of punishment (0% of the students assessed it positively, M=1.2, SD=0.6, while 7.6% of the teachers did (M=1.3, SD=0.7). Unfortunately (this is reality), many lecturers do not possess enough foreign language skills to publish abroad, which is a requirement nowadays for academic positions. Despite all steps taken in Georgia during the last 20 years, students' foreign language skills are not good enough either. The assessors believe that the lack of language skills (whether native or foreign) should not be viewed as an excuse for plagiarizing.

Table 7. Reasons for plagiarism (items 13, 16-19)

	students	academic personnel	assessors
lack of time	13% (M=1.3913, SD=0.93043)	3.8% (M=1.1154, SD=0.42720)	20% (M=1.6, SD=1.03724)
having something more important to do	4.3% (M=1.4783, SD=0.88792)	3.8% (M=1.0769, SD=0.47881)	0% (M=1.5, SD=0.50855)

lack of punishment	0% (M=1.1739, SD=0.64306)	7.6% (M=1.3077, SD=0.72864)	90% (M=3.4, SD=0.67466)
lack of language skills	17.4% (M=1.3043, SD=1.051134)	19.2% (M=1.6538, SD=0.92640)	0% (M=1.3, SD=0.46609)

According to table 8, the majority of the students (82.6%, M=3.26, SD=1.0) and the academic personnel (84.6%, M=3.4, SD=1.0), as well as all the assessors (M=3.2, SD=0.8) realize that plagiarism decreases the intellectual curiosity, so necessary for a researcher. About a half of the students (52.2%, M=2.4348, SD=1.14799) and the teachers (46.2%; (M=2.5385, SD=1.16251) in the research believe that the harm of plagiarism is limited to themselves, while few assessors (20%, M=1.9; SD=0.71197) think so. Eventually all the respondents need to come to this viewpoint.

The majority of the respondents (65.2% of the students, M=2.6957, SD=1.13274; 80.8% of teachers, M=3.076, SD=0.78830, and, surprisingly, least of all - 60% of the assessors, M=2.5; SD=1.04221) realize it harms the country on the whole. Interestingly, the harm to the country is seen by fewer respondents than the harm done to the institution. They should learn to think of a wider scale.

Table 8. Aspects of harm inflicted by plagiarism (item 21, 37-39)

	students	academic personnel	assessors
kills intellectual curiosity	82.6% (M=3.26, SD=1.04608)	84.6% (M=3.3846, SD=1.01274)	100% (M=3.2, SD=0.76112)
harms myself only	52.2% (M=2.4348, SD=1.14799)	46.2% (M=2.5385, SD=1.16251)	20% (M=1.9; SD=0.71197)
harms my institution	100% (M=3.4348, SD=0.50121)	88.4% (M=3.4615, SD=0.80346)	80% (M=2.9, SD=1.15520)
harms my country	65.2% (M=2.6957, SD=1.13274)	80.8% (M=3.076, SD=0.78830)	60% (M=2.5; SD=1.04221)

In table 9 the results of anonymous items 23 and 25 do not contradict each other, which makes the answers reliable. It reveals that the majority of the students (88.2%), the academic personnel (92.3%) and the assessors (70%) view plagiarism as unacceptable. And, vice versa, few respondents view it as unimportant (8.7% of the students, M=1.1, SD=0.7; 7.8% of the teachers, M=1.2308, SD=0.7; and none of the assessors, M=1, SD=0), which is not a bad result, but, of course, it is important that the answers find plagiarism important and unacceptable.

Generally, in the items of this table the respondents are quite unanimous ($0 < SD < 0.7$), except the issue whether plagiarism is criminal or not. The majority of the students (95.6%; M=3.8261, SD=0.64306) and teachers (92.3%, M=3.7692, SD=0.70336) equally and all the assessors think plagiarism is unethical, simultaneously viewing it as immoral (91.3%, 96.3%, and 90%, correspondingly) and even criminal 65.2%, 61.5% and 40%, consequently (which reveals that they confuse plagiarism with violation of copyright).

Table 9. Degree / type of harmfulness of plagiarism in Georgia (items 23, 25-28)

views on plagiarism	students	academic personnel	assessors
unimportant	8.7% (M=1.1305, SD=0.74859)	7.8% (M=1.2308, SD=0.703)	0% (M=1, SD=0)
unacceptable	86.9% (M=3.5217, SD=0.93664)	93.3% (M=3.73018, SD=0.71717)	100% (M=4, SD=0)
unethical	95.6% (M=3.8261, SD=0.64306)	92.3% (M=3.7692, SD=0.70336)	100% (M=4, SD=0)
immoral	91.3% (M=3.5870, SD=0.77678)	92.3% (M=3.6538, SD=0.7390)	90% (M=3.3, SD=0.65126)
criminal	65.2% (M=2.8696, SD=1.16636)	61.5% (M=2.6538, SD=1.15274)	40% (M=2.4, SD=0.81368)

According to table 10, more than half of the students (55.5%; M=2.6087, SD=1.0211510) and academic personnel (53.9%; M=2.5769, SD=0.89325) and about a third of the assessors (30%; M=2.3; SD=0.79438) view punishment as the major way to fight plagiarism, which is not so. Their views need to be changed.

The assessments of the items 40 and 41 partially overlap, which shows that the respondents do not well discriminate between intended and unintended plagiarism. Otherwise, more respondents support differentiated attitude to punishment (65.2% of the students, M=3.0; SD=1.03280; 88.5% of the teachers, M=3.2008; SD=0.89914; and 80% of the assessors, M=3.2, SD=0.76112), the teachers and assessors being unanimous enough in their views.

Table 10. The role of punishment (items 24, 29, 33, 40-41)

	students	academic personnel	assessors
Punishment as the main measure of fighting plagiarism	55.5% (M=2.6087, SD=1.0211510)	53.9% (M=2.5769, SD=0.89325)	30% (M=2.3; SD=0.79438)
Non-differentiated punishment	47.8% (M=2.5217, SD=0.93664)	50% (M=2.5285, SD=0.69906)	30% (M=2.2, SD=0.61026)
Differentiated punishment	65.2% (M=3.0;SD=1.03280)	88.5% (M=3.2008; SD=0.89914)	80% (M=3.2, SD=0.76112)
Differentiated punishment	80.8% (M=3.1538, SD=0.72449)	80.8% (M=3.1538, SD=0.72449)	90% (M=3.0, SD=0.78784)
Very strict punishment for professionals	47.8 (M=2.5652, SD=1.10860)		30% ()

And finally, in table 11 we see that the majority of the students (95.6%; M=3.5; SD=0.6), teachers (84.6%; M=3.3, SD=0.8) and assessors (80%; M=3.5; SD=0.8) righteously believe that PDSs should be available to both students / researchers and assessors, while some still follow the punitive approach to their application and, correspondingly, think that students / researchers should not use the devices as they may try to cheat them (43.4%, 42.3% and 40% of the respondents' groups think so, correspondingly). The views of some respondents are obviously contradictory: the two questions are opposite and the sum of percentages of answers should constitute 100%, however, it is higher. Probably, it is caused by the formulation of the second item (Plagiarism detecting services should not be

available to students /researchers, so that they don't invent ways how to cheat them), anyway, these findings are somehow inconclusive.

Due to a lot of advertisement (especially to the best and most expensive PDSs), the majority of the students (69.5%; M=2.8; SD=1.1), the teachers (73.1%; M=2.9; SD=1.0) and the assessors (60%; M=2.7; SD=0.9) believe that just with the help of PDSs it is possible to detect plagiarism. In reality, as it has been mentioned (Betts et al., 2012), PDSs just discover textual coincidences, but to define which of them are really cases of plagiarism, human factor is important.

Table 11. Efficiency of PDSs (items 34-35, 39)

	students	academic personnel	assessors
PDSs should be available to both students (researchers) and their assessors.	95.6% (M=3.5117; SD=0.58648)	84.6% (M=3.3462, SD=0.83747)	80% (M=3.5; SD=0.82001)
PDSs should be available only to assessors.	43.4% (M=2.3913; SD=1.14462)	42.3% (M=2.1923; SD=1.08535)	40% (M=2.3; SD=1.11880)
only PDSs are enough to solve the problem of plagiarism	69.5% (M=2.8261; SD=1.10160)	73.1% (M=2.8846; SD=0.98327)	60% (M=2.7; SD=0.9139)

As for additional comments, both students and teachers made few.

Teachers' comments:

- ✓ I liked the questionnaire, although there are too many items dealing with types of plagiarism. The authors had better to concentrate on one aspect of the problem. Anyway, it is so good that the problem was raised.
- ✓ Hopefully, the day will come when plagiarism will no longer be a problem.
- ✓ Not only the reasons of plagiarizing are laziness and lack of education, but vice versa as well.
- ✓ Sometimes people are falsely blamed of plagiarism, it is important to analyze their text well before deciding.
- ✓ I think, in our society many cases of "plagiarism" are unintentional plagiarism, due to the lack of knowledge on the issue. It is very important to train both students and academic staff to avoid plagiarism.

Students' comments:

- ✓ Thank you for raising the problem and researching the case.
- ✓ This problem must be solved. However, we cannot solve it only if we punish students and researchers for stealing information from other authors. It is university responsibility to teach students from the very beginning how to write academically and how to avoid plagiarism. However, punishment is also needed.

- ✓ Glad to participate in a research on the issue. I think we should not seek the root in personalities. Universities have to provide such quality of knowledge and skills, explain about plagiarism so well that students avoid it and do quality research.

Assessors' comments:

- ✓ Punishment for (fragmentary) self-plagiarism should not be strict.
- ✓ To my mind, one of the major ways to fight plagiarism is to teach BA students what it is.

Conclusions and recommendations

Universities need to develop a clear policy of dealing with plagiarism which should be first of all educational and educative and only then punitive. Lack of understanding in Georgia that plagiarism should be dealt with starting with bachelor education was found out. Unfortunately, when we start teaching to avoid plagiarism only in master's programs, the bad habits are already too rooted in students.

Lack of understanding in Georgia of the difference among cheating, plagiarism and violation of copyright was revealed. It means that theoretical knowledge about plagiarism, its types and nature should be improved among students, teachers and assessors. The ways of avoiding plagiarism should be explained and practiced.

Either not all universities in Georgia have adequate information of plagiarism policies or students and academic staff are not checking university web-sites. In both cases university administrations have to develop a clear plagiarism policy and to help (to require from) students and academic staff to use this information. We also need to keep in mind that the policy should involve all possible consequences (punishments) of plagiarism.

Both students' and academic staff's values concerning academic integrity are often inappropriate in Georgia (achievement vs. mastery). Measures have to be taken to change their values.

A more practical approach to paraphrasing while referring to other researchers' opinions has to be developed in Georgia. Today fighting with plagiarism too often looks like just a technical issue. Efforts against stealing ideas (instead of poor paraphrasing skills) should be emphasized first of all. Unfortunately, for now our opinion (as well as the majority of the respondents' opinions on the issue) is not recognized and verbatim (language skills) approach to plagiarism dominates.

Students have to be taught to do referencing in oral presentations as well, especially in case of original ideas, they need to realize that speaking on a topic as if the ideas are all the speaker's is unethical.

Whatever the reasons are, intended plagiarism has to be punished. It is essential that assessors manage to discriminate between intended and unintended plagiarism. Plagiarism is a complicated phenomenon and a grave blame, so measures taken against it should be in congruence with the committed wrong.

It is very important to raise both students' and academic staff's awareness of how harmful plagiarism is for them, their institution and the whole country. At the same time they should not be put under too much time and task pressure that would provoke their desire to plagiarize. Plagiarism prevention is essential in dealing with it.

Universities need to have professional PDSs that will be available to both students and teachers, to apply the system both for preventive and assessment reasons. They also need to provide training to students and involved personnel to enable them to use the software. At the same time, universities need to ensure that the PDSs are not used to violate students' / researchers rights, but to provide their academic honesty. Also, it should not be deemed that PDSs will define whether plagiarism occurred or not, it is necessary to involve specialists in the process in order to make the assessment qualified and fair.

Holding researches like ours within the educational institutions will help their administrations to monitor the real situation. Hopefully now that the ERASMUS + and CBHE project is on the way in Georgia, so many higher education institutions have started paying more attention to the issue due to authorization and accreditation requirements, the situation in Georgia is going to improve.

References:

- Anney, V.N. and Mosha, M.A. (2015). Student's plagiarisms in higher learning institutions in the era of improved internet access: Case study of developing countries. *Journal of Education and Practice*, 6, 13, p. 203-217.
- Anson, C.M. (2011). Fraudulent practices: Academic misrepresentations of plagiarism in the name of good pedagogy. *Composition Studies*, 39, 2, p. 29-43.
- Auer, N. and Krupar, E. (2001). Mouse click plagiarism: The role of technology in plagiarism and the librarian's role in combating it. *Library Trends*, 49(3): 415-432.
- Bailey, C. and Chellen, R. (2015). Student perceptions of the value of Turnitin text-matching software as a learning tool. *Practitioner Research in Higher Education*, 9, 1, p. 38-51.
- Bailey, J. (2017). The top ten plagiarism stories of 2016. Retrieved from <http://www.ithenticate.com/plagiarism-detection-blog/the-top-10-plagiarism-stories-of-2016#.WcOlgvMjHcs>
- Bakradze, L., Bregvadze, T., Gurchiani, K., Lortkipanidze, T., Urushadze, N., Glonti, L., and Janashia, S. (2016). Plagiatis problema da misi aghqma saqartveloshi [Problems of plagiarism and its perception in Georgia]. Tbilisi. Retrieved from <https://drive.google.com/file/d/0B8EsOg5UNGftWnQtRDJXSV9pSHc/view>
- Balbuena, S.E. and Lamela, R.A. (2015). Prevalence, motives, and views of academic dishonesty in higher education. *Asia Pacific Journal of Multidisciplinary Research*, 3, 2, p. 69-75.
- Belter, R. and DuPre, A. (2009). A Strategy to reduce plagiarism in an undergraduate course. *Teaching of Psychology*, 36(4), p. 257-261.

- Bennett, K. K., Behrendt, L. S., and Boothby, J. L. (2011). Instructor perceptions of plagiarism: Are we finding common ground? *Teaching of Psychology*, 38(1), p. 29-35.
- Betts, L.R., Bostock, S.J., Elder, T.J., and Trueman, M. (2012). Encouraging good writing practice in first-year psychology students: An intervention using Turnitin. *Psychology Teaching Review* Vol. 18 No. 2, p. 74-81
- Bikse, V., Lusena-Ezera, I., Rivza, B. and Volkova, T. (2016). The transformation of traditional universities into entrepreneurial universities to ensure sustainable higher education. *Journal of Teacher Education for Sustainability*, 18, 2, p. 75-88.
- Bird, S. (2002). Self-plagiarism and dual and redundant publications: What is the problem? *Science and Engineering Ethics*, 8, (4,) p. 543-544.
- Blomster, J., Venn, S., and Virtanen, V. (2014). Towards developing a common conception of research-based teaching and learning in an academic community. *Higher Education Studies*, 4, 4, p. 62-75.
- Bolkan, J.V. (2006). Avoid the plague: Tips and tricks for preventing and detecting plagiarism. *International Society for Technology in Education*, March, p. 10-13.
- Brabazon, T. (2015). Turnitin? Turnitoff! The deskilling of information literacy. *Turkish Online Journal of Distance Education-TOJDE*, 3, 2, p. 13-32.
- Burg, B. et al. (2007). *Writing with Internet Sources, Expository Writing Program*. Harvard College, USA.
- Burstein, M. (2006). Plagiarism. *The Valve*. Retrieved from <http://www.thevalve.org/go/valve/article/plagiarism/>
- Butakov, S., Dyagilev, V. and Tskhay, A. (2012). Protecting students' intellectual property in the web plagiarism detection process. *The International Review of Research in Open and Distributed Learning*, 13, 5, p. 1-19.
- Carroll, J. (2007). *A Handbook for Deterring Plagiarism in Higher Education*, 2nd ed. Oxford: The Oxford Centre for Staff and Learning Development.
- Cizek, G.J. (1999). *Cheating on Tests: How To Do It, Detect It, and Prevent It*. Mahwah, N.J: L. Erlbaum Associates.
- Connolly, P. (2009). *Ethics in Action: A Case-Based Approach*. Malden, MA: Wiley-Blackwell.
- Colnerud, G. and Rosander, M. (2009). Academic dishonesty, ethical norms and learning. *Assessment and Evaluation in Higher Education*, 34(5), p. 505-517.
- Copyright Office. 2016. Circular 92. Copyright law of the United States and related laws contained in Title 17 of the United States Code. Retrieved from <https://www.copyright.gov/title17/title17.pdf>
- Doss, D.A., Henley, R., Gokaraju, B., McElreath, D., Lakey, H., Hong, Q., and Miller, L. (2016). Assessing domestic vs. international student perceptions and attitudes of plagiarism. *Journal of International Students*, 6, 2, p. 542-564.

- Eaton, S.E., Guglielmin, M. and Kojo Otoo, B. (2017). Plagiarism: Moving from punitive to proactive approaches. Selected Proceedings of the IDEAS Conference 2017 Leading Educational Change. Calgary, Canada, p. 28-36.
- Ellery, K. (2008). Undergraduate plagiarism: A pedagogical perspective. *Assessment and Evaluation in Higher Education*, 33, 5, p. 507-516.
- Emerson, L., Rees, M., and McKay, B. (2005). Scaffolding academic integrity: Creating a learning context for teaching referencing skills. *Journal of University Teaching and Learning Practice*, 2, 3, p. 13-24.
- Evans, R. (2006). Evaluating an electronic plagiarism detection Service: The importance of trust and the difficulty of proving students don't cheat. *Active Learning in Higher Education*, 7, p. 87-100.
- Evering, L.C. and Moorman, G. (2012). Rethinking plagiarism in the digital age. *Journal of Adolescent and Adult Literacy*, 56, 1, p.35-44.
- Foster, A.L. (2002). Plagiarism-detection tool creates legal quandary. *Chronicle of Higher Education*, 48, p. 37-39.
- Gilmore, J., Strickland, D., Timmerman, B., Maher, M., and Feldon, D. (2010). Weeds in the flower garden: An exploration of plagiarism in graduate students' research proposals and its connection to enculturation, ESL, and contextual factors. *International Journal for Educational Integrity*, 6, 1, p. 13-28.
- Girard, N. J. (2004). Plagiarism: An ethical problem in the writing world. *AORN Journal*, 80(1), p. 13-15.
- Greenberger, S., Holbeck, R., Steele, J., and Dyer, T. (2016). Plagiarism due to misunderstanding: Online instructor perceptions. *Journal of Scholarship of Teaching and Learning*, 16, 6, p. 72-84.
- Group of Eight. (2012). Research performance of Australian universities. *Policy Note*, 4. Retrieved from <http://files.eric.ed.gov/fulltext/ED536029.pdf>
- Halupa, C.M. (2014). Exploring student self-plagiarism. *International Journal of Higher Education*, 3, 1, p. 121-126.
- Halupa, C. and Bolliger, D.U. (2013). Faculty perceptions of student self-plagiarism: An exploratory multi-university study. *Journal of Academic Ethics*, 11 (4), p. 297-310.
- Hayes, N. and Introna, L. (2005). Systems for the production of plagiarists? The implications arising from the use of plagiarism detection systems in UK universities for Asian learners. *Journal of Academic Ethics*, 3, 55-73.
- Holt, E.A. (2012). Education improves plagiarism detection by biology undergraduates. *BioScience*, 62, 6, p. 585-592.
- Howard, R.M. (1992). A plagiarism pentimento. *Journal of Teaching Writing*, 11, 2, p. 233-245.
- Jamieson, S. and Howard, R.M. (2011). Unraveling the Citation Trail. Project Information Literacy Smart Talk. *The Citation Project*, no. 8. Retrieved from <http://projectinfolit.org/st/howard-jamieson.asp>
- Iliia University. (2016). Integrity – short version. Retrieved from iliauni.edu.ge/uploads/other/41/41357.doc

- Keck, C. (2006). The use of paraphrase in summary writing: A comparison of L1 and L2 writers. *Journal of Second Language Writing*, 15, p. 261-278.
- Kennett, D.J., Reed, M.J. and Lam, D. (2011). The importance of directly asking students their reasons for attending higher education. *Issues in Educational Research*, 21, 1, p. 65-74.
- Law of Georgia on Higher Education (2014). Retrieved from <http://www.eqe.ge/res/docs/2014120816022280962.pdf>
- McCabe, D.L., Feghali, T., and Abdallah, H. (2008). Academic dishonesty in the Middle East: individual and contextual factors. *Research in Higher Education*, 49, 5, p. 451-467.
- Merriam-Webster Dictionary. (n.d.). Retrieved from <https://www.merriam-webster.com/dictionary/cheat>
- Moulton, J., and Robinson, G. (2002). Plagiarism. In Becker, L. and Becker, C. (Eds.), *Encyclopedia of Ethics*, p. 1316-1318. New York, NY: Garland Publishing.
- Mundava, M. and Chaudhuri, J. (2007). Understanding plagiarism: The role of librarians at the University of Tennessee in assisting students to practice fair use of information, *College and Research Libraries News*, 68, 3, p. 170-173
- Nicholls, D. G. and Feal, R. G. (2009). *MLA Handbook for Writers of Research Papers* (7 ed.). New York: Modern Language Association of America.
- Norton, L.S., Tilley, A.J., Newstead, S.E. and Franklyn-Stokes, A. (2001). The pressures of assessment in undergraduate courses and their effect on student behaviours. *Assessment and Evaluation in Higher Education*, 26, p. 269–284.
- Open Society Georgia Foundation and ERASMUS + Office. (2016). "Kargi" samecniero praqtikis uzrunvelyofa [Safeguarding good scientific practice]. Tbilisi. Retrieved from <https://drive.google.com/file/d/0B8EsOg5UNGfteVNUcE9FRmZQMDA/view>
- Park, C. (2003). In other (people's) words: plagiarism by university students – literature and lessons. *Assessment and Evaluation in Higher Education*, 28, 5, p. 471-488.
- Pennycook, A. (1996). Borrowing others' words: Text, ownership, memory, and plagiarism. *TESOL Quarterly*, 30(2), p. 201-230.
- Perry, B. (2010). Exploring academic misconduct: Some insights into student behaviour. *Active Learning in Higher Education*, 11, 2, p. 97-108.
- Pitchford, K.T. (2012). Mouse click plagiarism: Can technology help to fight back? *Practitioner Research in Higher Education*, 6, 2, p. 58-68.
- Price, J. and Price, R. (2005). Finding the true incidence rate of plagiarism. *International Education Journal*, 2005, 6(4), p. 421-429.

- Shahabuddin, S. (2009). Plagiarism in Academia. *International Journal of Teaching and Learning in Higher Education*, 21, 3, p. 353-359.
- Sicak, A. and Arslan, A. (2016). The Relation between prospective teachers' goal orientations and academic dishonesty. *Universal Journal of Educational Research*, 4(7), p. 1660-1666.
- Starovoytova, D. and Namango, S. (2016). Viewpoint of undergraduate engineering students on plagiarism. *Journal of Education and Practice*, 7, 31, p.48-65.
- Tayan, B.M. (2016). Academic misconduct: An investigation into male students' perceptions, experiences and attitudes towards cheating and plagiarism in a Middle Eastern university context. *Journal of Education and Learning*, 6, 1, p. 158-166.
- Teeter, J. (2015). Deconstructing attitudes towards plagiarism of Japanese undergraduates in EFL academic writing classes. *English Language Teaching*, Vol. 8, No. 1, p. 95-109.
- Turnitin. (2011). Helpful Info for Grant Writers. Retrieved from turnitin.com/static/resources/.../turnitin/.../Turnitin_Helpful_Info_for_Grant_Writers.doc. [tp://www.turnitin.com](http://www.turnitin.com)
- U.S. Department of Health and Human Services (2005). *42 CFR Parts 50 and 93 Public Health Service Policies on Research Misconduct*. Retrieved from http://ori.hhs.gov/sites/default/files/42_cfr_parts_50_and_93_2005.pdf
- Van Dusen, V. (2013). Intellectual property and higher education: Challenges and conflicts. *Administrative Issues Journal: Education, Practice and Research*, 3, 2. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1057074.pdf>
- Vij, N., Soni, N.K., and Makhdumi, G. (2009). Encouraging academic honesty through anti-plagiarism software. 7th International CALIBER-2009, Pondicherry University, Puducherry, February 25-27, p. 439-448. https://www.inflibnet.ac.in/caliber2009/accepted_papers.html
- Walker, A.L. (2008). Preventing unintentional plagiarism: A method for strengthening paraphrasing skills. *Journal of Instructional Psychology*, 35, 4, 387-395.
- Wang, Y., Chen, M., Liang, Y., and Jiang, Y. (2013). Surveillance in programming plagiarism beyond techniques: An incentive-based fishbone model. *International Conference on Educational Technologies*. Kuala Lumpur, Malaysia, p. 49-55.
- Wheeler, G. (2009). Plagiarism in the Japanese universities: Truly a cultural matter? *Journal of Second Language Writing*, 18(1), p. 17-29.
- Wilkinson, J. (2009). Staff and student perceptions of plagiarism and cheating. *International Journal of Teaching and Learning in Higher Education*, 20, 2, p. 98-105.