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Investigating Plagiarism: The Form and the Motivation in Performing Plagiarism in High Education

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Abstract

The rapid development of information technology, especially the Internet is pointed out to be factor driving the student to practice plagiarism. Prevention efforts continue to be made both from government policies and stakeholder by creating software anti-plagiarism. However, in the reality the practice of plagiarism remains common and relatively more widespread. This practice continues to be varied, so that we need to up-date the information and findings through investigations plagiarism practices in student assignments. The method used was a mixed-method approach or mix of quantitative and qualitative approaches. A quantitative approach was done by using software turnitin.com to scan for plagiarism indication of the level of student assignment in common. To study the behavior of plagiarism, the interview process was also done informally to students who commit high plagiarism. The results showed that the pattern of students' plagiarism consists of five forms: sham paraphrasing, illicit paraphrasing, other plagiarism, copying verbatim and purloining. Illicit paraphrasing practices are a form of copy-paste literature review and did not pay attention to the bibliography. Besides, the practice of plagiarism is closely associated with low academic writing knowledge. Therefore, the practice of plagiarism should not only be viewed from the perspective of the academic violations, but also from the other perspectives.

Keywords: *forms of plagiarism, investigation, assignments*

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Introduction

How to prevent plagiarism? This question was the main reason to conduct a study about plagiarism, since plagiarism is considered as a 'disease of ethics' that the solution is more charged to each individual. Honest and dishonest become a stigma that should be labelled to the student who did or did not commit plagiarism. However, a study conducted by Chanock (2008) said that generally plagiarism occurs because of the unconscious, accidental and ignorance of the students about plagiarism. Inevitably the definition of plagiarism is still debatable, even standards/criteria for plagiarism itself are still not the same (Adiningrum, 2015). Regulation No. 17 Year 2010 from the National Education Minister concerning the prevention and control of plagiarism in college, defines plagiarism as "an act intentionally or unintentionally in gaining or trying to obtain credit or value to an academic work, citing in part or all of the work and/or academic works of others recognized as rich academic, without declaring appropriately and adequately". At the same regulation, it is also mandated the university leaders to make prevention and control of plagiarism, but how? There are no rules or guidelines that could derivative referenced to make the process of prevention of plagiarism.

Prevention initiatives have been carried out as proposed by Sagoro (2013), to improve the institutional elements and to integrate/synergize the supervision of the institution/campus, faculty and academic staff, but it was not specified on how the technical implementation will be done. Sagoro (2013), Jia, Liu, Zhang, and Liu (2012), Soori, Prilepok, Platos, and Snášel (2015), and Shah, Modha, and Dave (2016) are more propose on plagiarism prevention by one way, in which lectures/college check the students' assignment directly. There has been no innovation by involving students in active and participatory. Even though, there are many tools that can currently be used to keep students involved checking their assignment directly. By involving students in checking plagiarism, then they consciously check before collecting the assignment. So the findings of Chanock (2008) who said that plagiarism which occurs predominantly influenced by unintentional/unconscious can be reduced as much as possible. Another opinion comes from Pecorari (2008) based on linguistics perspective. Traditionally, plagiarism can be recognized from written organizations through non-focused topics, not coherent between paragraphs and subject-verb disagreement.

In recent years, plagiarism issue in the higher education environments become highlight by a large number of stakeholders, educators, and IT experts. The Indonesian government has contributed to this issue by declaring the National Education Decree No. 17 of 2010 concerning the prevention and control of plagiarism in Higher Education. The instigators of IT also responded by creating the software scan anti-plagiarism. A huge response from various circles is as one of the measures to fight against the issue of writing ethics. Although there are no exact data, we believe that due to easy to obtain digital information from the internet, the practice of 'copy-and-paste' cannot be avoided (Beasley, 2004). The development of the Internet shows the evolution of new technologies on how to get information from the user to the digital realm that makes it easy to duplicate a variety of data and information (Darbyshire & Burgess, 2006). The practice of plagiarism is done by not only students, which previously been investigated by Octaberlina (2009), but also occurred among educators as in the case Anggito Abimanyu (Wahono, 2014) and the German education minister Annette Schavan (Kistyarini, 2013). Special phenomenon of plagiarism done by students, a study which had been conducted by Ulum (2011) in one of the universities in Malang concluded that there are three forms of plagiarism, they are (1) taking text either in part or whole without citation, (2) taking ideas from other parties which the is considered as the his/her work even though it still says the source, (3) paraphrasing other's sentence in the new sentence without mentioning the source.

The causative factors of plagiarism were investigated by Aryani (2013) at the Medan State University which concluded that there were five factors in plagiarism: (1) does not convinced with the self-ability, (2) lazy to do the work, (3) difficult to find reference books, (4) abuse of computer technology (copy-paste), and (5) do not know the restrictions and sanctions of plagiarism. The findings from Ulum (2011) and Aryani (2013) reinforces the opinion of Walker (1998) and Jordan (2001) who stated that plagiarism cannot be separated from the study of behavior. From this study, Walker (1998) proposes three precautions: (1) the academic staff needs to create methods to prevent plagiarism, (2) academic staff should be aware of the learning structure to examine the possibility of plagiarism, and (3) academic staff should be able to detect plagiarism. In the global scope, a recent study conducted by Adiningrum (2015) need to get the attention of plagiarism found no difference in standards between the developed countries to developing countries, including Indonesia. She said that in developed countries, the prevention of plagiarism is tighter to perform than in Indonesia.

The issue above shows that the previous efforts were done partially without considering a collaborative process between educational institutions and students. It needs to get a common concern that the above efforts have advantages and disadvantages. Sagoro (2013) said that we require the effort

of all parties to overcome the practice of plagiarism. The consequence is that all parties should have the same understanding of plagiarism; the reality says the opposite one. Not all parties have the same understanding about the definition of plagiarism. Even Adiningrum (2015) found the lack of uniformity of understanding regarding the definition of plagiarism. It becomes another issue to synergize prevention efforts while all the parties have not had the same understanding. Furthermore, the anti-plagiarism software proposed by Jia et al. (2012), Soori et al. (2015), and Shah et al. (2016), is concern on scanning the similarity of words and phrasing from one source to other sources. Certainly, it will not be detected when the source is cited have different languages. For example, the English manuscript was translated into Indonesian.

Based on the advantages and disadvantages of various preventions and controls of plagiarism above, this study was conducted to investigate the practice of plagiarism in universities. Investigations conducted through anti-plagiarism scan technology approach that uses turnitin.com and engaged students actively in the task of checking the task before it is collected. Therefore, the chance factor as delivered by Chanock (2008) can be avoided in this study.

Research Methodology

This plagiarism investigation was conducted by using a mixed-method approach—a mix of quantitative and qualitative approaches. A quantitative approach used turnitin.com anti-plagiarism software while the qualitative approach used depth interviews with some students who do plagiarism. Interviews were conducted to the students who they were not aware that they were become an object of interviewed. This approach was done to explore the students' knowledge and attitude to the practice of plagiarism. Interviews were conducted informally, as usual chatting on the sidelines of the lecture. Therefore, students did not know that this interview was done to interrogate the practice of plagiarism.

To find indications of plagiarism, researchers used anti-plagiarism software that has been subscribed by UNDIP—turnitin.com—as shown in Figure 1. In this software, all the assignments are put one-by-one in the software and it will automatically get an ID paper. Each task will be scanned automatically via the internet which contains two sources: (1) free internet sources and (2) the source of other tasks in Turnitin that have been previously uploaded. Therefore, the indication of plagiarism can be from other author assignments and from Internet sources.

In the database of Turnitin (Figure 1) each task will get a score percentage of similarity with other sources. The greater percentage of similarity will get a different label, the label range from blue to red. Fifth label differentiated by colors: Blue-Green-Yellow-Orange-Red. After scanning process is completed by turnitin.com, then automatically the tasks will be sorted by the degree of similarity from lowest to the highest degree of similarity. This sequence shows indications of possible plagiarism by students. The next step is to check manually to each article to know the original source manuscripts used. Checking manually is extremely important since the high degree plagiarism does not always in line with high degree of similarity. Each label/code describes the indication of plagiarism degree. Turnitin itself is divided into 5 categories, not found indications of plagiarism (zero similarities) to very high plagiarism indication (degree of similarity 75% - 100%). The fourth explanation of label/code outlined in Table 1 below:

Table 1.
Code and similarity tolerance

No	Similarity Code	Similarity Tolerance	Note
1	Blue	0%	Zero similarity
2	Green	1% - 24%	Low degree of similarity
3	Yellow	25% - 49%	Moderate degree of similarity
4	Orange	50% - 74%	High Degree of similarity
5	Red	75% - 100%	Very high degree of similarity

Source: turnitin.com

AUTHOR	TITLE	SIMILARITY	GRADE	RESPONSE	FILE	PAPER ID	DATE
Putri Mutiara Bena	PEMBANGUNAN KARAKTER PESERTA DIDIK MELAL...	41%		*		617726660	26-Dec-2015
fauzia aulia	Tugas Bahasa Indonesia Fauzia Ghitha Aul...	44%		*		617706503	25-Dec-2015
fauzia ghitha aulia	Tugas Bahasa Indonesia Fauzia Ghitha Aul...	44%		--		617706256	25-Dec-2015
Irda Mayasari	Solusi Permasalahan Transportasi Perkota...	44%		*		617699787	25-Dec-2015
pratiwi dwi lestari	21040115120017	45%		*		617764107	27-Dec-2015
Bagas Darmawan Hadi	BENCANA ROB DI KOTA SEMARANG	47%		*		617732828	26-Dec-2015
Kemala Yasmine	STRUKTUR UMUR SERTA TINGKAT PENDIDIKAN	47%	65	*		617515458	23-Dec-2015

Figure 1. turnitin.com display for assignment

This research data sourced were from academic papers prepared by the students—277 papers. The entire assignments were collected from 2015 and 2016. The target papers were 88 titles from students outside the Diponegoro University and 189 titles were from Diponegoro University students' paper. The task that comes from outside Undip was from two academic national writing competition organized by Association of Mechanical Engineering Students and Association of Planning Students. The competition which organized by Association of Mechanical Engineering Students was academic writing competition by the title *Mechanical Educational Fair in 2016*, while the competition which organized by Association of Planning Students was academic writing competition *Dipocition 2016*. In these competitions, the researcher became judges. The second data source was from Indonesian lecturing assignment (1st semester) and from Location and Spatial Pattern Analysis/Analogue subject (2nd semester). These two data were chosen because in Indonesian subject, the students were introduced regarding plagiarism, so it is assumed they have understood earlier about plagiarism.

Data and Discussions

Forms indication of plagiarism

From the 277 papers entered into turnitin.com database, there were 4 indications of plagiarism: low, moderate, high and very high indications. 56% of students' papers are categorized low plagiarism indication, and 34% papers are categorized moderate plagiarism, while 7% are categorized as high plagiarism and 3% are very high. See Figure 2 below.

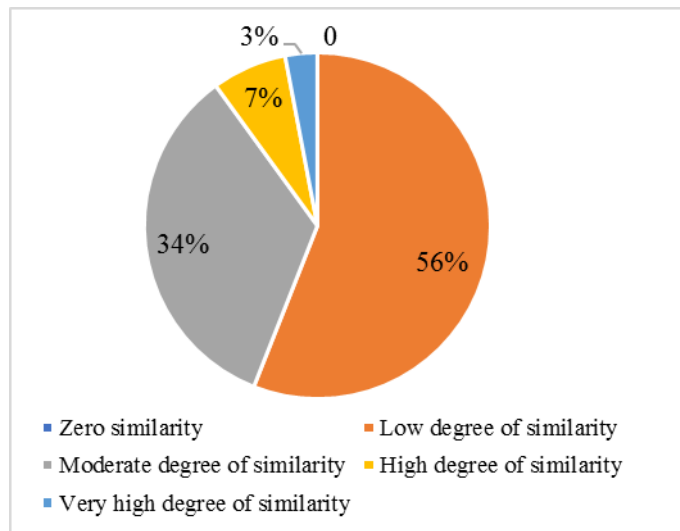


Figure 2. Percentage of plagiarism level done by the students

From all papers, only yellow, orange, and red labelled paper can be identified as plagiarism. What about the green labelled? Can it be categorized into plagiarism? Yes, it can, but it can be tolerated. The green labelled paper (the similarity rate of 1% -24%) is tolerable because the machine just found indications of plagiarism in matters of a general nature as an example of an affiliate, agency name and bibliography. In the student environment, 'copy-paste' dominantly occurs or copying sourced from articles/manuscripts from others on the internet which then combine freely and recognized as their work. According to Walker (1998), there are seven types of behavior under plagiarism in higher education, namely:

1. *Sham paraphrasing*. Creating paraphrase and specifying the source but produce different meanings. It Use to strengthen/justify a statement.
2. *Illicit paraphrasing*. Entering statements/material from others into a sentence but not in accordance with the quotations in the bibliography.
3. *Other plagiarism*. Copying material from other students and claimed the source of another friend.
4. *Verbatim plagiarism*. Copying material from a text but it does not match with the reference source.
5. *Recycling*. Giving the same task more than once for the program/different tasks.
6. *Ghost Writing*. The task is created by the third student.
7. *Purloining*. Copying from another student's paper without the knowledge of his friend.

Not all types of plagiarism were found in tasks organized and gathered by the students. There are five forms/types of plagiarism that occurred in this study, namely Sham paraphrasing, illicit paraphrasing, Other Plagiarism, Verbatim Copying and Purloining. These five forms of plagiarism can be found in nearly all student assignments which then are categorized as moderate to very high. We found that the plagiarisms were combined in the students' assignment. Students commit plagiarism in diverse forms in one document. Moreover, the illicit paraphrasing is the major form of plagiarism that is most often done by the students. The majority of the papers (over 97%) contain this kind of plagiarism.

Paraphrasing illicit practice is often done by the students by quoting/ copying-pasting literature review and did not pay attention to the bibliography. It is commonly occurring that literature review is a result of mixing text clippings from various sources. If we see from the paper components, namely: abstract, introduction + literature review, writing method, data and discussion as well as the conclusions, the literature review is the biggest part that contains plagiarism.

Knowledge of Plagiarism

The students who were indicated to plagiarism (low, moderate, high and very high) then were invited for interviews in order to explore the behavior of plagiarism. According to Jordan (2001), the act of plagiarism is one of the behavior study. To understand more about plagiarism behavior, the researcher then conducted interviews to students to understand the knowledge and attitudes.

Knowledge

The students' knowledge about plagiarism is still relatively low. When it is viewed from the task structure, the practice of plagiarism is more done in literature review. The students assume that literature is a basic thing in understanding problem statement/themes which then being analysed in their academic

work. The most common assumption is that the literature review is relatively the same from one literature to another literature. Therefore, they usually take the existing literature without paraphrasing. They think that literature that has been reviewed by others will be the same with the literature reviewed by their own. Therefore, they do not need to paraphrase or rewrite according to the character of their writing.

"I think that the literature review is the same from one to the other literature, Sir. The most important is my paper contains literature review, and then we use it as a base to analyze, that is all. Well, when we took a statement from one book and then the book is read by 2 or 3 people, the result is still the same."

The students assume that plagiarism is reprehensible act. It copies of other people's work without mentioning the original source. The next question is what if we use someone's work then we still cite the source, even if we do not paraphrase it. Answering that question, the student confidently replied that it was not an act of plagiarism. Taking someone's work both from book and personal blog are commonly occur in all plagiarism form. From these findings, it is important to note Chanock's (2008) statement about 'unwitting plagiarism'. Students do not understand their academic violations that they done, even they assume it is normal.

Motivation and Attitude (attitude)

Students' ignorance about plagiarism is the major factor in doing of plagiarism. They never felt guilty because they do not know about plagiarism. In addition, students said that they have a lot of number of assignments in a limit time, so they do plagiarism. Their reasons are reasonable, some courses demand small and big task. The big scale task is a task group that is usually presented at the end of the course. The issue of limited time and feels urgent are the driving factors of students to do plagiarism. Three forms of plagiarism as found in Ulum (2011) are also found in this study. They are always reasoned to have only a short time to make a task and do not believe in their abilities. These findings reinforce Aryani's (2013) statement which finds 5 factors causing students to plagiarize. From this research can be drawn interesting lessons either from the positive side or the negative side. On the positive side, students who know the level of turnitin similarity, will consciously be more careful in making the task of college. Student vigilance is formed and very helpful in making the original task. The role of lecturers is great for improving students' writing skills, especially for preventing poor paragraphs or preventing an unfocused text or preventing subject-verb disagreement as suggested by Pecorari (2008). From the negative side, the low motivation of students to do the tasks turned out to be the biggest factor they do plagiarism. This issue needs to get serious attention from all elements of society, government and academic institutions.

Conclusion

The act of plagiarism by students can not only be seen from the offense, but also be seen in terms of education and awareness in doing plagiarism. From this study, we can conclude that the knowledge of students about plagiarism has not been evenly distributed among the students. Students' ignorance about plagiarism is the major factor in doing plagiarism. They never felt guilty because they do not know about plagiarism. In addition, students said that they have a lot of number of assignments in a limit time, so they do plagiarism. Their reasons are reasonable, some courses demand small and big task. The big scale task is a task group that is usually presented at the end of the course. The issue of limited time and feels urgent are the driving factors of students to do plagiarism.

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