# GREEK UNDERGRADUATE AND GRADUATE STUDENTS' OPINIONS ABOUT PLAGIARISM CAUSES

Theodoros Karasalides Mathematics Teaching Research Laboratory, Department of Primary Education, University of Ioannina theodoroskarasalidis@gmail.com Anastassios Emvalotis Associate Professor, Director of Mathematics Teaching Research Laboratory, Department of Primary Education, University of Ioannina aemvalot@uoi.gr

# Abstract

Plagiarism, intentional or unintentional, is a serious ethical and integrity issue that weighs heavily on the scientific and academic community. Although it is a usual practice, there is very little research found involving Greek universities. The present study aims at examining Greek university students' opinions regarding plagiarism causes. A total of 663 undergraduate (655 participants) and graduate (8 participants) students from two Departments (Dept.1 and Dept.2) of a Greek university, participated in this study. Two research methods were implemented for the examination of students' perceptions and experiences with plagiarism. More specifically, a specially designed questionnaire was developed and administered to the undergraduate students whereas semi-structured interviews were conducted with the 8 graduate students. According to the study's results, all participating students identified similar main causes of plagiarism, while their Department of origins functioned as a differential factor for their perceptions. Overall, our findings were in agreement with the ones reported in the relevant international literature. Lastly, we propose that future research focuses on teachers' opinions on this matter as well as the effect of a variety of variables, such as reading time and academic year, on students' perceptions about plagiarism.

# Key words

Causes, graduate students, Greece, plagiarism, undergraduate students.

# Περίληψη

Οπλαγιαρισμός, εκούσιος ή ακούσιος, συνιστά ένα σοβαρό ζήτημα ηθικής και δεοντολογίας στην επιστημονική και ακαδημαϊκή κοινότητα. Μολονότι είναι μία κοινή πρακτική, εντοπίζεται έρευνα για τα ελληνικά πανεπιστήμια. Η παρούσα εργασία στοχεύει στην εξέταση των απόψεων των φοιτητών ελληνικού πανεπιστημίου αναφορικά με τις αιτίες του πλαγιαρισμού. Το δείγμα αποτελείται συνολικά από 663 προπτυχιακούς (655 συμμετέχοντες) και μεταπτυχιακούς (8 συμμετέχοντες) φοιτητές δύο Τμημάτων (Τμ. 1 και Τμ. 2) ενός ελληνικού πανεπιστημίου. Για τη διερεύνηση των αντιλήψεων και εμπειριών των φοιτητών/τριών εφαρμόστηκαν δύο ερευνητικές μέθοδοι. Συγκεκριμένα, αναπτύχθηκε και χορηγήθηκε ένα ειδικά διαμορφωμένο ερωτηματολόγιο στους προπτυχιακούς φοιτητές, ενώ διεξήχθησαν ημιδομημένες συνεντεύξεις με 8 μεταπτυχιακούς φοιτητές. Σύμφωνα με τα ευρήματα της έρευνας, όλοι οι συμμετέχοντες υπέδειξαν κοινές κύριες αιτίες πλαγιαρισμού, ενώ εντοπίστηκαν διαφορές στις αντιλήψεις τους βάσει του Τμήματος από το οποίο προέρχονται. Γενικά, τα ευρήματα συμφωνούν με τη σχετική διεθνή βιβλιογραφία. Τέλος, προτείνεται η διεξαγωγή μελλοντικής έρευνας σχετικά με τις απόψεις των διδασκόντων για τον πλαγιαρισμό καθώς και την επίδραση στις αντιλήψεις των φοιτητών για τον πλαγιαρισμό μεταβλητών, όπως ο χρόνος διαβάσματος και η ακαδημαϊκή εμπειρία.

#### Λέξεις κλειδιά

Αιτίες, Ελλάδα, πλαγιαρισμός, προπτυχιακοί φοιτητές, μεταπτυχιακοί φοιτητές.

#### **0. Introduction**

**P** lagiarism is found to be a vital and interesting research topic as a vast amount of relevant articles exists. Students' knowledge (Gullifer & Tyson, 2014, Leonard et al., 2014) and perceptions (Stephens et al., 2007, Williams et al., 2012, Yeo, 2007) about plagiarism, their engagement in that (Akbulut et al., 2008, Eret & Ok, 2014, Harries & Rutter, 2005, Zafarghandi et al., 2012) and plagiarism causes (Devlin & Gray, 2007, Riasati & Rahimi, 2013) constitute the basic topics studied abroad. Moreover, many eminent people have been accused of plagiarism including philosophers, scientists and writers (Park, 2003).

As far as Greece is concerned, Greek Press has presented articles about plagiarism (https://greekuniversityreform.wordpress.com), but there is a great research gap regarding students' plagiarism. Thus, the present study aims at examining students' opinions about plagiarism causes.

Subsequently, definitions about the main research concepts and review of relevant literature are presented. Also, methodological plan and research results follow. The article continues with a discussion about the results and limitations. It ends with conclusions and recommendations for future research.

### 1. Definitions

The literature review of the relevant articles leads to the conclusion that the researchers use a great number of concepts regarding integrity issues, such as cheating and plagiarism.

Cheating is defined as fraudulent acts in order for someone to take credit for someone else's academic work (Joy et al., 2009). According to Gragam et al. (1994, as quoted in Walker, 1998) cheating includes the usage of illicit notes or cribs notes during exams, the acquirement of exams answers by signal and the action of copying.

In parallel with that, plagiarism is defined as the appropriation of someone's words, ideas, or academic work without providing citation or references about its authentic resource (Ehrich et al., 2014, Handa & Power, 2005, Hayes & Introna, 2005, as quoted in Karasalides & Emvalotis, 2017). So, plagiarists tend to present them as personal achievements (Deckert, 1993, Howard, 1995, Joy et al., 2009, Park, 2004, Wan et al., 2011).

Both cheating and plagiarism constitute academic dishonest acts (Leonard et al., 2014, Lin & Wen, 2007) and are considered to be academic misconduct (Schrimsher et al., 2011).

In conclusion, plagiarism seems to constitute a part of cheating and they are considered both as unacceptable academic actions.

# 2. Causes of plagiarism

There is a great research interest about the factors which contribute to students' involvement to plagiarism. Researchers usually tend to utilize either questions or interviews in order to collect students' answers about this issue. As far as the first instrument is concerned, they present a great majority of factors to subjects encouraging them to choose whichever they think contributes to plagiarism (Akbulut et al., 2008, Brimble & Stevenson-Clarke, 2005, Foltynek et al., 2014). Alternatively, the participants are urged to demonstrate their opinion about the plagiarism causes (Andrews et al., 2007, Selwyn, 2008). On the other hand, there are articles where researchers utilize interviews in order to collect the appropriate information (Ashworth et al., 1997, Devlin & Gray, 2007).

Having taken the relevant articles into consideration, a vast amount of plagiarism causes is found and they are presented in two groups, the personal and the extrinsic factors.

### 2.1. Personal factors

Regarding the personal factors, Karasalides (2016) proposes that deficient skills and knowledge about academic writing contribute to students' plagiarism. Particularly, students deemed the absence or the inadequacy of research and writing skills as contributing to plagiarism (Arce Espinoza & Monge Najera, 2014, Brimble & Stevenson-Clarke, 2005, Devlin & Gray, 2007, Ellery, 2008, Eret & Ok, 2014, Hu & Lei, 2014, Riasati & Rahimi, 2013). In parallel with that, they have demonstrated that the imperfect knowledge of foreign languages constitutes an obstacle for the study of literature (Riasati & Rahimi, 2013, Wan et al., 2011). Furthermore, inadequate knowledge (Andrews et al.,

2007, Arce Espinoza & Monge Najera, 2014, Eret & Ok, 2014) and understanding (Devlin & Gray, 2007) of the concepts plagiarism and cheating have also been reported.

Additionally, students have supported that the characteristics of assignment, the way which they cope with that and the personal ambitions are relevant with plagiarism causes (Karasalides, 2016). In particular, the lack of knowledge regarding an assignment's topic (Devlin & Gray, 2007) and the imperfect understanding of its requirements (Wan et al., 2011) are believed to be contributing factors. Also, the lack of interest in a subject or an assignment (Akbulut et al., 2008, Andrews et al., 2007, Ashworth et al., 1997, Brimble & Stevenson-Clarke, 2005, Eret & Ok, 2014, McCabe, 1992, Riasati & Rahimi, 2013), the absence of focus in that (Franklyn-Stokes & Newstead, 1995, Goh, 2013, Hu & Lei, 2014), the disagreement with the way of assessment (Ashworth et al., 1997) and the lack of motivation for active participation in the procedure (Akbulut et al., 2008, Erkaya, 2009) are causes, too. At the same time, students have maintained that the desire for high grades could urge them to engage in plagiarism actions (Akbulut et al., 2008, Arce Espinoza & Monge Najera, 2014, Brimble & Stevenson-Clarke, 2005, Eret & Ok, 2013, Hu & Lei, 2014).

Apart from these factors, students have demonstrated some personal opinions and concerns (Karasalides, 2016). For example, the fear of failure in a subject (Goh, 2013, Hu & Lei, 2014, McCabe, 1992, Szabo & Underwood, 2004) and the belief that personal work does not matter are proposed as plagiarism causes (Akbulut et al., 2008, Eret & Ok, 2014, Foltynek et al., 2014). Simultaneously, they proposed that cheating actions are harmless or without importance which could lead them to engage in it (Brimble & Stevenson-Clarke, 2005, Foltynek et al., 2014, McCabe, 1992).

Lastly, the engagement in social life and the desire to attract others (Akbulut et al., 2008) are further causes of plagiarism.

#### 2.2. Extrinsic factors

As far as the extrinsic factors are concerned, literature abounds with various agents relevant to pressure (Karasalides, 2016), such as time pressure (Akbulut et al., 2008, Arce Espinoza & Monge N jera, 2014, Brimble & Stevenson-Clarke, 2005, Devlin & Gray, 2007, Ellery, 2008, Eret & Ok, 2014, Foltynek et al., 2014, Franklyn-Stokes & Newstead, 1995, Riasati & Rahimi, 2013, Sheard & Dick, 2003), parental pressure (Devlin & Gray, 2007, McCabe, 1992, Riasati & Rahimi, 2013, Sheard & Dick, 2003) and social pressure (Devlin & Gray, 2007, Riasati & Rahimi, 2013) for the successful completion of studies that will eventually lead to finding a job.

Additionally, relevant research suggests that students offering help to their friends (Andrews et al., 2007, Brimble & Stevenson-Clarke, 2005, Franklyn-Stokes & Newstead, 1995, McCabe, 1992) and peer influence (Brimble & Stevenson-Clarke, 2005, Eret & Ok, 2014, McCabe, 1992) are further plagiarism causes.

A subgroup of extrinsic factors for plagiarism relates to the university and its policy regarding academic integrity issues (Karasalides, 2016). More specifically, vague university rules (Ashworth et al., 1997), lack of education on plagiarism issues (Perry, 2010, Riasati & Rahimi, 2013), non-implementation of detection procedures (Ashworth et al., 1997, Brimble & Stevenson-Clarke, 2005) and lack of penalty in the case of detection (Akbulut et al., 2008, Andrews et al., 2007, Brimble & Stevenson-Clarke, 2005, Ellery, 2008, Eret & Ok, 2014), are proposed causes of plagiarism.

A significant factor that is believed to play a vital role in the spread of plagiarism is the teachers' attitude toward students and academic integrity issues (Karasalides, 2016). Researchers report that teachers do not devote adequate time evaluating students' assignments (Akbulut et al., 2008, Arce Espinoza & Monge N jera, 2014, Hu & Lei, 2014, Riasati & Rahimi, 2013), provide vague instructions about them (Arce Espinoza & Monge N jera, 2014, McCabe, 1992) and even support students' engagement in plagiarism (Ashworth et al., 1997, Brimble & Stevenson-Clarke, 2005). Also, inadequate elaboration about the topic of assignment (Ashworth et al., 1997, Brimble & Stevenson-Clarke, 2005) has been reported to be another possible factor for students' plagiarism.

Lastly, literature abounds with arguments regarding the influence of the character of assignment, its requirements and the way of its completion (Karasalides, 2016). In this context, studies support that the assignment's level of difficulty (Brimble & Stevenson-Clarke, 2005, Eret & Ok, 2014, Foltynek et al., 2014, Riasati & Rahimi, 2013, Szabo & Underwood, 2004), the workload of university (Akbulut et al., 2008, Andrews et al., 2007, Arce Espinoza & Monge N jera, 2014, Ashworth et al., 1997, Devlin & Gray, 2007, Eret & Ok, 2014, Foltynek et al., 2014, McCabe, 1992, Sheard & Dick, 2003) and the uninteresting topics of the assignments (Akbulut et al., 2008, Arce Espinoza & Monge N jera, 2014, Brimble & Stevenson-Clarke, 2005, Devlin & Gray, 2007, Foltynek et al., 2014, Selwyn, 2008), the good presentation of a topic in a source (Ashworth et al., 1997) and the cost in case of failure in a course are further causes of plagiarism.

# 3. Method

### 3.1. Research objectives

The present research aims at examining university students' opinions regarding plagiarism causes.

# 3.2. Sample

The sample of the present research consists of 655 sophomore, junior and senior undergraduate students of two Departments of a Greek university (Dept.1 and Dept.2) of.

Department						
		Dept.1		De	pt.2	
		N	(%)	Ν	(%)	
Academic year	1 <sup>st</sup>	0	(0,0)	2	(0,8)	
	2 <sup>nd</sup>	120	(30,2)	72	(28,8)	
	3 <sup>rd</sup>	111	(27,9)	108	(43,2)	
	4 <sup>th</sup>	162	(40,7)	63	(25,2)	
Gender	Male	64	(16,1)	14	(5,6)	
	Female	334	(83,9)	236	(94,4)	
	Missing	5	(1,3)	5	(2,0)	

#### Table 1: The characteristics of participants.

Also, 8 former postgraduate students of the first Dept.1 participated in the research. Different educational levels were selected so that the possible differences in students' opinions could be examined as a result of a more systematic engagement in academic life.

# 3.3 Sampling method

The convenience sampling was selected in order to facilitate students' approach. Generalization of results to broader population was not among research goals (Creswell, 2015, Mitchell & Jolley, 2013).

# 3.4. Research hypotheses and questions

It was expected that participants would suggest the following factors as plagiarism causes:

- lack of time,
- parental pressure,
- workload,
- fear of failure as a result of the level of difficulty of assignments,
- desire for high grades,
- peers' engagement in plagiarism,
- lack of research and writing skills,
- lack of penalty in case of detection,

- lack of interest regarding the subject,
- lack of fluent use of foreign languages,
- professors' lack of time for the assessment of the assignment,
- easiness of copying,
- lack of precise instructions about the way of writing,
- the difficulty of plagiarism detection,
- professors' lack of particular interest about the originality of work,
- the non-harmless nature of plagiarism,
- insignificance of plagiarism.

In parallel with that, the following research question has been set:

• Will, there be any differences in students' opinions about plagiarism causes depending on the Department?

# 3.5. Instrumentation

#### 3.5.1. Questionnaire

A specially formulated questionnaire was created so that students' opinions about plagiarism causes could be examined. In particular, the instrument consists of a scenario which presents a student copying word-to-word and combining material from various sources without providing any citations. A list of plagiarism causes follows the scenario and the participants were urged to choose whichever they deem as a contributing factor (self-report technique). The technique of scenarios allows participants to be separated from their personal opinion as a result of the different roles expressed by them (Emerson & Conroy, 2002, Wood et al., 1988, as cited in Marshall & Garry, 2006). Also, scenarios offer them the opportunity to conceptualize the situations in which they could be found (Barrett & Cox, 2005). Apart from that, students had the opportunity to propose possible further factors at the end of the questionnaire. The causes were derived from the relevant literature. Lastly, an answer sheet was formulated in order to be scanned by the Remark® Office OMR program and students' answers to be gathered.

The questionnaire was as follows:

K, a student in philology, engages in copying word-to-word quotations from various sources without providing citations in order to complete his assignment.

- Which factors lead him to this decision?
- He does not have enough time to complete his assignment,
- His family pressures him to successfully complete his studies,

- He has a heavy workload due to other engagements,
- He believes that the particular assignment is too difficult to cope with and fears for failure.
- He wants to get high grades for this course,
- He believes that it's something which everyone does,
- He thinks that he lacks the necessary research and writing skills,
- He thinks that there are no penalties for such actions,
- He has no interest in the particular subject,
- He is not a proficient user of foreign languages and tends to copy Greek translations,
- He believes that his Professor will not spend time evaluating his assignment,
- He feels that it's easier to copy than to cope with the requirements of the assignment,
- He has not received precise instructions on how to write the assignment,
- He believes that he will not be detected by the Professor,
- He deems that his Professor supports such actions,
- He believes that it's not harmful,
- He thinks that it does not matter,
- Other (please specify).

#### 3.5.2. Interviews

Apart from the questionnaire, semi-structured interviews were conducted with 8 former graduates from a postgraduate program of Dept.1 so that their experience about plagiarism practices could be collected. The semi-structured interviews have predefined questions whose order could be changed according to researchers' opinion (Robson & McCartan, 2016). Furthermore, some questions can be excluded or others can be added (Robson & McCartan, 2016). This type of interview allows the researcher to start from a topic and, then, to continue depending on participants' answers (Robson & McCartan, 2016).

In this context, students were presented with various actions of plagiarism and were urged to express their opinions about them and their causes. Having taken the lack of their correspondence information into consideration, we approached them via Facebook<sup>1</sup>. Participants were sent a message about the research and its objectives. The interviews were conducted by phone or via Skype and lasted 20-25 minutes each.

#### 3.6. Analysis process

Regarding reliability analysis, Cronbach's alpha was estimated. Absolute and relative frequencies were calculated for each Department and the non-parametric test Mann-

Whitney U was implemented (as the assumption of normal distribution was not satisfied) in order to find departmental differences.

As far as the interviews are concerned, they were recorded and transcribed. Firstly, Cohen's kappa measure was calculated with a view to measuring inter-rater agreement for categorical items. (Cohen, 1960, Mitchell & Jolley, 2013). Content analysis was used in order to organize students' opinions. Particularly, a categorical organization was used in which codes were given to participants' discourse (Cohen et al., 2011). Then, these codes were organized under broader themes (Babbie, 2014, McMillan et al., 2010).

# 4. Results

### 4.1. Plagiarism causes

The answers collected from the questionnaires and interviews are presented combined.

In this context, a vast amount of plagiarism causes was demonstrated by the majority of participants according to descriptive statistics. Particularly, the majority of students deemed that lack of time combined with heavy workload could lead someone to engage in plagiarism. 'Perhaps, it's sometimes the time pressure. I'm in a hurry to write something. I take quotations and copy a great amount of these. So, I finish. [...]' ST06.

Additionally, participants proposed that the difficulty of assignment completion and the fear of failure could lead to plagiarism. Also, the desire for high grades and the easiness of copying follow the former factors. Regarding the last cause, '[...] we often find easy solutions. We prefer it than coping with that alone and complete our task' ST01. In parallel with that, parents tend to impose pressure on students for the successful completion of studies.

Furthermore, participants stressed the lack of necessary writing and research skills, and the lack of fluency in foreign languages as plagiarism causes. Additionally, four interviewees told about the lack of knowledge regarding the correct way of writing and the inability of paraphrasing as a result of not understanding the source:

- '[...] student's unawareness can lead to it, so.' ST08
- '[...] he cannot understand the original source and consequently he cannot paraphrase it. As a result of that, he tends to copy word-to-word because of its convenience.' ST02.

Simultaneously, they underscored the inexperience as a plagiarism cause:

'[Lack of] experience.' ST08

Apart from that, participants proposed possible objective difficulties which could prevent contact with the information resource (e.g. library), such as economic problems and the distance learning.

S.N.	Causes	Ν	(%)	S.N.	Causes	Ν	(%)
1	Lack of time	288	(75,4)	10	Absence of penalties	250	(63)
2	Workload	275	(72)	11	Teacher's not spending time for evaluation of assignment	249	(62,9)
3	Easiness of copying	281	(70,8)	12	Vague instructions about way of writing	243	(61,2)
4	Inadequate knowledge of foreign languages	279	(70,3)	13	Peers engagement in plagiarism	234	(58,9)
5	Harmless action	275	(69,3)	14	Disinterest for the subject	230	(57,9)
6	Desire for high grades	273	(68,8)	15	Lack of writing and research skills	215	(54,2)
7	Difficult assignment and fear of failure	267	(67,3)	16	Parental pressure	205	(53,5)
8	Insignificant action	260	(65,5)	17	Teacher's disinterest for the originality of assignment	186	(46,9)
9	Not detection of plagiarism	253	(63,7)	18	Other(s)	86	(27,1)

Table 2: Results for students from Dept. 1

Furthermore, students deemed that teachers' attitude toward assignment and academic integrity issues could lead them to plagiarism. For example, when a teacher does not spend time evaluating students' papers, they think that he will not detect such cases and, consequently, will not impose penalties on them. '[...] The second seems cunning. It looks like an attempt to deceive someone adept at thinking he would not realize my copying [...].' ST02.

In parallel with that, when a teacher does not offer precise instructions about how they should write an assignment, it could urge them to engage in unacceptable actions. 'I think that the absence of instruction and comments from the teacher to the other members of the group was the issue.' ST08. In contrast, participants were found dichotomous regarding the argument that the teacher's disinterest about the originality of assignment could function as plagiarism cause.

Students maintained some personal opinions which could function as contributing factors to plagiarism, as well. So, the disinterest about the subject for which they have

to complete an assignment could affect them negatively. 'It's surely related to how interesting the topic of the assignment is. When a topic interests you, then you spend more time on it and complete it correctly. On the other hand, when it's not interesting to you and you put it through just to get a pass for the subject, you will not dedicate time and will choose the easiest way of completeness.' ST04. Simultaneously, some participants responding to the open question proposed the disinterest in the School and the assignment.

Laziness and boredom were supported as causes, as well. These factors were also proposed by some graduates:

- '[...] However, I think that it's only a minority of students who engage in it because of their feeling boredom to participate actively to it or due to its fast and easy character [...]' ST05
- 'it happens because they feel boredom. They do not want to cope with it and to get tired. So, they tend to choose the easy solution.' ST06

Others proposed the negligence in the usage of citations:

'[...] I sometimes (may) find some quotations and put it in my assignment. It's my thought to add the citations but I do not remember its resource, what it is, why I used it because of my inserting new material. [...]' ST06.

Furthermore, the lack of any correlation between the current assignment and the future job requirements could function as a factor for plagiarism. Except for that, students proposed that copying may not constitute an important action and as a result it may be not harmful. Moreover, they supported that a vast amount of their peers tend to engage in such actions that it could affect them. The social pressure, including the parental influence and peer pressure, has also presented:

'[...] Family, namely the educational level of family, could affect the student's corresponding level. The surrounding people play an important role, also. Observing peers' way of assignment completion and the easiness of their copying, students think that they could do it, as well.' ST05.

Moreover, some presented personal ethics as a vital factor which could be relevant to these actions. For example, they stressed the absence of culture and maturity:

'[...] there lacks ethics and culture.' ST05 and '[...] lack of students' maturity [...]' ST06.

Last but not least, one graduate supported that the capitalist system affects students' behavior. 'It's surely the [economic] system's fault. Everything has been converted to products. I could have everything without searching or getting tired if I offered some money. It's surely a result of the capitalist system [...]' ST05.

Having taken the proposed causes by students from the two Departments into consideration, participants seem to demonstrate the same main factors. Students from Dept.1 demonstrated time pressure as the first cause and the heavy workload as the second. On the other hand, their peers from Dept.2 chose the heavy workload as the first plagiarism cause and the time pressure as the second. Moreover, the easiness of copying and the lack of fluency in foreign languages function as causes.

S.N.	Causes	n	(%)	S.N.	Causes	Ν	(%)
1	Workload	194	(80,5)	10	Difficult assignment and fear of failure	161	(64,4)
2	Lack of time	184	(76,3)	11	Vague instructions about the way of writing	157	(62,8)
3	Easiness of copying	184	(73,6)	12	Insignificant action	147	(58,8)
4	Inadequate knowledge of foreign languages	183	(73,2)	13	Absence of penalties	146	(58,4)
5	Not detection of plagiarism	181	(72,7)	14	Disinterest for the subject	145	(58)
6	Harmless action	179	(71,9)	15	Teacher's disinterest for the originality of assignment	131	(52,8)
7	Teacher's not spending time for evaluation of assignment	177	(71,4)	16	Lack of research and writing skills	132	(52,8)
8	Peers engagement in plagiarism	168	(67,2)	17	Parental pressure	110	(45,5)
9	Desire for high grades	166	(66,4)	18	Other(s)	37	(19)

 Table 3: Results for the students from Dept. 2

Extrinsic factors	Intrinsic factors
Lack of time	Absence of problem
Teacher's disinterest	Not spending time (2)
Lack of information regarding the correct way of	Disinterest to engage (2)
writing (2)	Disinterest for assignment (4)
Absence of feedback	Disinterest for School (2)
Doubt for the evaluation of assignment	Disinterest for penalties
easiness	Boredom (10)
distance learning	Laziness
Economic problems	Disappointment from School
Inability in approaching the library	Lack of concentration because of heartbreak
Poor cooperation with group members	success
Poor cooperation with teacher	Past successful engagement in plagiarism
Unexpected event	Dislike for the teacher
Workload	Desire for enjoying during studies
Assignment not relevant to future job	Low self-esteem- insecurity
requirements	

Table 4: Further causes proposed students responding to open question

Lastly, regarding the research Hypothesis it seems to be valid as participants demonstrated the proposed factors as plagiarism causes.

# 4.2. Bivariate analysis

Non-parametric test Mann Whitney U was implemented in order possible departmental differences in participants' opinions to be found. According to the results, students from Dept.1 tended to demonstrate more the heavy workload, the peers' engagement in plagiarism actions, teachers' not spending time evaluating the assignment and the absence of plagiarism detection as causes. On the other hand, participants from Dept.2 tended to choose more the parental pressure and other self proposed factors. Consequently, these differences respond to the research question.

	Dept. 1	Dept. 2	Z	Р
	Mean Rank	Mean Rank		
Parental pressure	303,23	328,45	-1,964	0,050
Heavy workload	322,25	295,75	-2,936	0,017
Peers engagement	334,32	307,61	-2,107	0,035
in plagiarism				
Teacher's not	333,03	305,69	-2,214	0,027
spending time in				
evaluation of				
assignment				
Not teacher's	334,66	305,71	-2,359	0,018
detecting				
plagiarism action				
Others	248,55	269,43	-2,095	0,036

Table 5: Statistically significant differences in causes depending on Department

# 5. Discussion

The present study aimed at examining undergraduate and graduate students' opinions regarding plagiarism causes. A combination of methodological techniques was implemented in order the research objective to be fulfilled. The results gathered by questionnaires and semi-structured interviews showed that participants demonstrated a vast amount of factors contributing to plagiarism. So, they confirm and boost the relevant literature. For example, time pressure (Akbulut et al., 2008, Arce Espinoza & Monge N jera, 2014, Brimble & Stevenson-Clarke, 2005, Devlin & Gray, 2007, Ellery, 2008, Eret & Ok, 2014, Foltynek et al., 2014, Franklyn-Stokes & Newstead, 1995, Riasati & Rahimi, 2013, Sheard & Dick, 2003) and heavy workload (Akbulut et al., 2008, Andrews et al., 2007, Arce Espinoza & Monge N jera, 2014, Ashworth et al., 1997, Devlin & Gray, 2007, Eret & Ok, 2014, Foltynek et al., 2014, McCabe, 1992, Sheard & Dick, 2003) have already been proposed in past researches.

The fact that both undergraduate and graduate students share the same opinions as to the causes of plagiarism constitutes a remarkable point. Particularly, the factors chosen by undergraduates were proposed by graduates, as well. Furthermore, participants had the opportunity to demonstrate other factors responding either in open question or in interviews. Among them was the lack of concentration, the past engagement in plagiarism, boredom, the social pressure, immaturity etc. In this context, some factors confirm the existing literature, such as the lack of knowledge regarding the assignment topic (Devlin & Gray, 2007, Riasati & Rahimi, 2013) and the belief about unworthy assignments (Akbulut et al., 2008, Eret & Ok, 2014, Foltynek et al., 2014).

# 6. Limitations

A mong research limitations, are the difficulty of students' approach. The self-report technique which was used in the questionnaire is criticized as participants may offer socially desirable answers (Lin & Wen, 2007, Scanlon & Neumann, 2002, Stephens et al., 2007) or may not be willing to answer honestly (Scanlon & Neumann, 2002).

# 7. Conclusions and recommendations

The present research constitutes a vital attempt so as plagiarism theme can be examined in Greece. Particularly, the students' opinions regarding plagiarism causes were the main objective. Having taken the results into consideration, it was deduced that students share the same way of thinking regarding the plagiarism causes. This means that undergraduates and graduates demonstrated the same factors as plagiarism causes confirming the existing literature. Simultaneously, departmental differences were found perhaps as a result of their unique experience.

Future researches could examine the effect of other independent variables in students' perceptions, such as reading time, academic year, etc. Moreover, teachers' opinions could constitute a research topic, as well.

# Σημείωση

# References

Akbulut, Y., S. Şendağ, G. Birinci, K. Kılıçer, M.C. Şahin & H.F. Odabaşı (2008) Exploring the types and reasons of Internet-triggered academic dishonesty among Turkish undergraduate students: development of internet-triggered academic dishonesty scale (ITADS). *Computers & Education*, 51(1): 463-473. doi: 10.1016/j.compedu. 2007.06.003

<sup>1.</sup> The present article presents only a part of a broader research plan conducted during the master thesis of a postgraduate program in a Greek university. Among the research objectives were the evaluation of completed theses for plagiarism. The first plan was to find graduates whose theses would have plagiarism clues in order to participate in interviews. So, they were approached but they didn't accept to participate in the research. Consequently, only one of those did.

- Andrews, K.G., L.A. Smith, D. Henzi & E. Demps (2007) Faculty and student perceptions of academic integrity at U.S. and Canadian dental schools. *Journal of Dental Education*, 71(8): 1027-1039.
- Arce Espinoza, L. & J. Monge N jera (2014) How to correct teaching methods that favour plagiarism: recommendations from teachers and students in a Spanish language distance education university. *Assessment & Evaluation in Higher Education*, 40:1-9. doi: 10.1080/02602938.2014.966053
- Ashworth, P., P. Bannister, P. Thorne & Students on the Qualitative Research Methods Course Unit (1997) Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment. *Studies in Higher Education*, 22(2): 187-203. doi: 10.1080/03075079712331381034
- Babbie, E.R. (2014) *The basics of social research*. Belmont, Calif.: Wadsworth/Cengage Learning (6th ed.).
- Barrett, R. & A.L. Cox (2005) "At least they' re learning something': the hazy line between collaboration and collusion. Assessment & Evaluation in Higher Education, 30(2): 107-122. doi: 10.1080/0260293042000264226
- Brimble, M. & P. Stevenson-Clarke (2005) Perceptions of the prevalence and seriousness of academic dishonesty in Australian universities. *The Australian Educational Researcher*, 32(3): 19-44. doi: 10.1007/BF03216825
- Creswell, J.W. (2015) Educational research: planning, conducting, and evaluating quantitative and qualitative research. Boston: Pearson (5th ed.).
- Cohen, L., L. Manion & K. Morrison (2011) *Research methods in education* (7th ed.). London, New York: Routledge (7th ed.).
- Cohen, J. (1960) "A coefficient of agreement for nominal scales.". *Educational and Psychological Measurement*, 20(1): 37-46. doi:10.1177/001316446002000104
- Deckert, G.D. (1993) Perspectives on plagiarism from ESL students in Hong Kong. *Journal* of Second Language Writing, 2(2): 131-148. doi: 10.1016/1060-3743(93)90014-T
- Devlin, M. & K. Gray (2007) In their own words: a qualitative study of the reasons Australian university students plagiarize. *Higher Education Research & Development*, 26(2): 181-198. doi: 10.1080/07294360701310805
- Ehrich, J., S.J. Howard, C. Mu & S. Bokosmaty (2014) A comparison of Chinese and Australian university students' attitudes towards plagiarism. *Studies in Higher Education*, 1-16. doi: 10.1080/03075079.2014.927850
- Ellery, K. (2008) Undergraduate plagiarism: a pedagogical perspective. *Assessment & Evaluation in Higher Education*, 33(5): 507-516. doi: 10.1080/02602930701698918
- Eret, E. & A. Ok (2014) Internet plagiarism in higher education: tendencies, triggering factors and reasons among teacher candidates. *Assessment & Evaluation in Higher Education*, 39(8): 1002-1016. doi: 10.1080/02602938.2014.880776

- Erkaya, O.R. (2009) Plagiarism by Turkish students: causes and solutions. *The Asian EFL Journal Quarterly*, 11 (2): 86-103
- Foltynek, T., J. Rybicka & C. Demoliou (2014) Do students think what teachers think about plagiarism? *International Journal for Educational Integrity*, 10(1): 21-30.
- Franklyn-Stokes, A. & S.E. Newstead (1995) Undergraduate cheating: who does what and why? *Studies in Higher Education*, 20(2): 159-172. doi: 10.1080/030750795 12331381673
- Goh, E. (2013) Plagiarism behavior among undergraduate students in hospitality and tourism education. *Journal of Teaching in Travel & Tourism*, 13(4): 307-322. doi: 10.1080/15313220.2013.839295
- Gullifer, J.M. & G.A. Tyson (2014) Who has read the policy on plagiarism? Unpacking students' understanding of plagiarism. *Studies in Higher Education*, 39(7): 1202-1218. doi: 10.1080/03075079.2013.777412
- Handa, N. & C. Power (2005) Land and discover! A case study investigating the cultural context of plagiarism. *Journal of University Teaching & Leraning Practice*, 2(3): 64-84.
- Harries, R. & P. Rutter (2005) Cheating by pharmacy students: perceptions, prevalence and comparisons. *Pharmacy Education*, *5*(1): 1-9. doi: 10.1080/15602210400026 030
- Hayes, N. & L.D. Introna (2005) Cultural values, plagiarism and fairness: when plagiarism gets in the way of learning. *Ethics & Behavior*, 15(3): 213-231. doi: 10.1207/s15327 019eb1503
- Howard, R.M. (1995). Plagiarisms, authorships, and the academic death penalty. *College English*, 57(7): 788-806. doi: 10.2307/378403
- Hu, G. & J. Lei (2014) Chinese university students' perceptions of plagiarism. *Ethics & Behavior*, 25(3): 233-255. doi: 10.1080/10508422.2014.923313
- Joy, M., G. Cosma, J. Sinclair & J.Y. Yau (2009) A taxonomy of plagiarism in computer science. In *EDULEARN09 Proceedings*, Barchelona, 3372-3379.
- Karasalides, T. & A. Emvalotis (2017) Defining plagiarism and academic dishonest practices. Scientific Journal of Department of Primary Education of University of Ioannina, 29, 93-112.
- Karasalides, T. (2016) Students' knowledge, perceptions and engagement in plagiarism: The case of the School of Education of University of Ioannina. Unpublished thesis, Department of Primary Education, University of Ioannina.
- Leonard, M., D. Schwieder, A. Buhler, D.B. Bennett & M. Royster (2014) Perceptions of plagiarism by STEM graduate students: a case study. *Science and Engineering Ethics*. doi: 10.1007/s11948-014-9604-2

- Lin, C.H.S. & L.Y.M. Wen (2007) Academic dishonesty in higher education-a nationwide study in Taiwan. *Higher Education*, 54(1): 85-97. doi: 10.1007/s10734-006-9047-z
- Marshall, S. & M. Garry (2006) NESB and ESB students' attitudes and perceptions of plagiarism. *International Journal for Educational Integrity*, 2(1): 26-37.
- McCabe, D.L. (1992) The influence of situational ethics on cheating among college students. *Sociological Inquiry*, 62(3): 365-374. doi: 10.1111/j.1475-682X.1992.tb 00287.x
- McMillan, J.H., J.F. Wergin & J.H. McMillan (2010) Understanding and evaluating educational research. Boston: Pearson (4th ed.).
- Mitchell, M.L. & J.M. Jolley (2013) *Research design explained*. Australia, Belmont, CA: Wadsworth Cengage Learning (8th ed.).
- Park, C. (2003) In other (people 's) words: plagiarism by university students—literature and lessons. *Assessment & Evaluation in Higher Education*, 28(5): 241-288. doi: 10.1080/0260293032000120352
- Park, C. (2004) Rebels without a clause: towards an institutional framework for dealing with plagiarism by students. *Journal of Further and Higher Education*, 28(3): 291-306. doi: 10.1080/0309877042000241760
- Perry, B. (2010) Exploring academic misconduct: some insights into student behaviour. Active Learning in Higher Education, 11(2): 97-108. doi: 10.1177/146978741036 5657
- Riasati, M.J. & F. Rahimi (2013) Why do iranian postgraduate students plagiarize? A qualitative investigation. *Middle-East Journal of Scientific Research*, 14(3): 309-317. doi: 10.5829/idosi.mejsr.2013.14.3.522
- Robson, C. & K. McCartan (2016) Real world research. Hoboken, Wiley (4th ed.).
- Scanlon, P.M. & D.R. Neumann (2002) Internet plagiarism among college students. Journal of College Student Development, 43(3): 374-385.
- Schrimsher, R.H., L.A. Northrup & S.P. Alverson (2011). A survey of Samford University studentsregarding plagiarism and academic misconduct. *International Journal for Educational Integrity*, 7(1): 3-17.
- Selwyn, N. (2008) "Not necessarily a bad thing...": a study of online plagiarism amongst undergraduate students. Assessment & Evaluation in Higher Education, 33(5): 465-479. doi: 10.1080/02602930701563104
- Sheard, J. & M. Dick (2003) Influences on cheating practice of graduate students in IT courses. *ACM SIGCSE Bulletin*, 35(3): 45-49. doi: 10.1145/961290.961527
- Stephens, J.M., M.F. Young & T. Calabrese (2007) Does moral judgment go offline when students are online? A comparative analysis of undergraduates' beliefs and

behaviors related to conventional and digital cheating. *Ethics & Behavior*, 17(3): 233-254. doi: 10.1080/10508420701519197

- Szabo, A. & J. Underwood (2004) Cybercheats: is information and communication technology fuelling academic dishonesty? *Active Learning in Higher Education*, 5(2): 180-199. doi: 10.1177/1469787404043815
- Walker, J. (1998) Student plagiarism in universities: what are we doing about it? *Higher Education Research & Development*, 17(1): 89-106. doi: 10.1080/0729436980170 105
- Wan, R., S.B. Nordin, M.B. Halib & Z.B. Ghazali (2011) Plagiarism among undergraduate students in an engineering- based university : an exploratory analysis. *European Journal of Social Sciences*, 25(4): 537-549.
- Williams, S., M. Tanner & G. Hale (2012) Academic integrity on college campuses. International Journal for Educational Integrity, 8(1): 9-24.
- Yeo, S. (2007) First year university science and engineering students' understanding of plagiarism. *Higher Education Research & Development*, 26(2): 199-216. doi: 10.1 080/07294360701310813
- Zafarghandi, A., F. Khoshroo & B. Barkat (2012) An investigation of Iranian EFL masters students' perceptions of plagiarism. *International Journal for Educational Integrity*, 8(2): 69-85.