Systematic Analysis of the Effects of Digital Plagiarism on Scientific Research: Investigating the Moroccan Context - Ibn Tofail University as Case Study

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Abstract

This paper investigates the phenomenon of "digital plagiarism" and its effects on scientific research in Moroccan universities. It subscribes itself in the recent research work that focuses on university students and Information Technology in this "soft age," if one may name it as such. Amid the catastrophic plummeting reading rates, the massive digital youth migration to and dense immersion into the e-content abyss, and the consequent extensive dependence on web-generated information without regular sound verification and/or academic documentation, this paper attempts to identify the causes of that phenomenon and specify the ways Moroccan university students, especially undergraduates, use online content relevant to doing/writing their graduation research papers.

Keywords: Online plagiarism, academic integrity, scientific research, documentation.

Objectives: To this end and assuming that online plagiarism is committed by Moroccan students both intentionally and unintentionally, this work surveys and analyzes the case of Ibn Tofail University (ITU, henceforth) Semester Six research students, especially students of the Department of English Studies, in order to determine their real perception of doing research and measure their real levels of research integrity, creativity, and productivity. This article therefore aims to contribute in solving the serious problem of digital plagiarism in Moroccan universities, which actually concerns not only B.A. undergraduates but also master and doctoral candidates, and establishing a genuine academic culture of doing scientific research.

Hypotheses: 1- The paper therefore hypothesizes that ITU S6 research students may plagiarize their graduation papers, wholly or partially, out of ignorance of research documentation styles such as MLA and APA usually used in doing/writing academic papers in Humanities and Social Sciences.

2- It equally hypothesizes that students plagiarize others' works intentionally because they lack the motivation, the interest, the theoretical and practical knowledge and the abilities/capacities of doing/writing research papers.

Research Questions: 1- Do ITU S6 research students plagiarize their graduation papers out of ignorance of research documentation styles such as MLA and APA usually used in doing/writing academic papers in Humanities and Social Sciences?

 2- Do ITU S6 research students intentionally plagiarize research papers from internet?

3- Are ITU S6 research students aware of the causes and effects of online plagiarism?

Research Methodology: This study uses a systematic data analysis-based approach. A combination of quantitative and qualitative analyses is deemed instrumental in investigating and assessing the data obtained from the field survey outlined above. Both processes of data collection and data analysis are carried out on the basis of that combination, as schematized in figure 1.
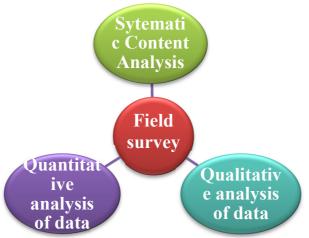
Figure1: Schematized representation of the research method used in this paper.

Contextualizing the Study:

This empirical study was designed on the basis that Semester Six students majoring in English Language and

Literature, the target population of this work, already took research methodology classes in Semester Five and therefore were familiar with plagiarism as notions and practices. The study therefore presupposes that this population has some knowledge and awareness of the rules, techniques, and steps of doing/writing academic/scientific graduation papers like B.A. monographs. More, the questionnaire was distributed to this randomly sampled segment of students after more than three months of working on their monographs, i.e. after having embarked on such elemental research steps as selecting the field of research, the research topic, preparing the bibliography, designing the outline, taking notes and drafting the first (sub)sections of their graduation papers. The questionnaire was distributed only after the students had attended several seminar meetings with their supervisors who were supposed to have highlighted to their supervisees what to do and what not to do throughout the different stages of writing graduation monographs.

No less important is the fact that this study stands out amid very scant scientific research about the impact of online plagiarism on the creativity and productivity of university students in Morocco.

Introduction and Literary Review:

A plethora of writings, academic and non-academic, print and online, has been published with a view to approaching the question of plagiarism, its causes, effects, and consequences within and without the borders of academia. Similarly, this study attempts to empirically investigate plagiarism, in its online version, as it is manifest in Moroccan universities.

Basically, a scientific research paper is meant to be properly documented, that is,

> When you borrow material to support your arguments, you should acknowledge it, otherwise it is considered plagiarized. Even if you paraphrase the author's ideas in your own words and style, you are still obligated to cite it by providing the complete bibliographical information. It is a dangerous misconception to believe that once you have restructured the original idea or sentence it automatically becomes yours. (Jamal En-Nehas, 1999, p.25).

However, breaching these research writing ethics has unfortunately become a globally common practice especially with worldwide accessibility of Internet content. The very easy act of copying and pasting material either ad verbatim or with modifications but without proper documentation is spreading despite the integrity policies installed in/by universities. Carter et al (2007) pointed out that "academic dishonesty has been reported to occur at rates as high as 82% (Stern and Havlicek, 1986) and 88% (Sierles, Hendrickx, and Circle, 1980)".

Accordingly and as based on a field survey carried out by Turnitin.com, an online company that develops software to detect cheating incidents in writing assignments, the "unethical shortcut" of copying and pasting material ad verbatim remains the most widely known form of digital plagiarism. Plagiarists here take all what they need for their term papers, graduation monographs, memoirs and even doctoral dissertations and submit them after making slight changes in hope of getting them accepted. Another widely used form is what Rebecca Moore Howard (1999) terms as "patchwriting" to refer to copying material "from a source text and then deleting some words, altering grammatical structures, or plugging in one synonym for another, " a practice that is "uniformly banned in composition handbooks and colleges' academic codes, … even when accompanied by citation and documentation" (p. xvii). Another form quite subtle in nature is that some students to deceive teachers into accepting their papers they do not copy and paste word for word but they paraphrase key words and ideas without citing the original sources.

This is said to happen in defiance of the academic code of ethics. "Nearly every school has an academic integrity policy, yet instructors tell us that blatant, intentional plagiarism is still frequently encountered," said the vice president of marketing at Turnitin, Chris Harrick (2016). A third common form of online plagiarism among the 879 Turnitin survey respondents involves the insertion of quite long excerpts copied from a given online source into assignment or research papers, in oblivion to the ethics of doing/writing a research. "Find-replace," the "hybrid" method, and the recycling and "remix" method, presented and succinctly explained in chart 1, are forms, inter alia, all of which culminate in copyright infringement.

Form of plagiarism	Meaning
"unethical shortcut" of copying and pasting	Plagiarizing others' work as much as needed
Paraphrasing without documenting	Rewriting material in oblivion of the source
Inserting long excerpts	integrating long passages into assignments or papers without respecting the rules of doing/writing research.
"Find-replace"	Changing or replacing phrases to escape being detected.
The "hybrid" method	Using cited sources and copied passages from others' works without documentation.
Recycling and "remix" method	Borrowing material from others' work, or self-plagiarizing without any citation.

Chart 1: Most widely spread forms of plagiarism (adapted from "The top ten ways college students plagiarize," E-campus News magazine).

So, it remains that despite the continuous reinforcement of academic integrity means and ways, students

also continue to come up with new methods of plagiarism that professors may find quite uneasy to detect. Professors and instructors have therefore to stay vigilant and strict vis-à-vis the e-plagiarism *inventions* developed and used by students whose target is su*ccess* no matter how unlawful the means might be. Yet, they also have to inform, guide, warn and raise more awareness of the students about plagiarism and its destructive effects. These efforts can help curb cases of the so-called unintentional plagiarism and emphasize that professors are conscious of the ways some students use to plagiarize copyrighted works, online or offline.

All similarly, digital plagiarism has become quite a prevalent global practice despite all the anti-plagiarism software advances and the reinforcement of the academic integrity policies. In a study carried out by Professor Donald McCabe from Rutgers University in May 2010, 58 % of 24, 000 students from 70 schools were reported to have plagiarized assignments and 95% of them admitted to have cheated in a way or another (Donald McCabe, 2010, in *Neil Kokemuller, 2015)*.

For more statistical data on plagiarism and academic integrity, The Josephson Institute Center for Youth Ethics carried a sizable survey to find that 59% out of 43000 high school students in public and private schools admitted cheating on a test and 34% of the surveyed population confessed to have cheated more than twice. The same study highlights that one out of three high school students used the Internet to plagiarize assignments or copy home works. Noteworthy here is the argument that this high school misbehavior migrates with students to universities to grow and expand, as it will be demonstrated and supported by the present paper later on.

Another survey of over 63700 US undergraduate and 9250 graduate students over the course of three years, from 2002 to 2005, also carried out by Donald McCabe, Rutgers University, pointed out that 36% of undergraduates and 24% of graduates admitted to "paraphrasing/copying few sentences from an Internet source without footnoting it". The inquiry did also highlight that 38% of the surveyed undergraduate population and 25% of the graduates admitted to "paraphrasing/copying few sentences from a written source without footnoting it," while 14% of students admitted to "fabricating/falsifying a bibliography".

David Callahan (2005) maintains that this widespread phenomenon of academic dishonesty is rooted in a widespread ethical crisis that trespasses academia and permeates all American society. The three authors therefore emphatically call for the ethical and moral development of students to cultivate in them a strong sense of academic integrity. Accordingly, Haviland and Mullin (2009) argue that students should also be made aware of the "tangible benefits of (intellectual) ownership within the academy … beyond the achieving of a grade" (p.11).

In the light of these large scale studies, which bespeak the degree of the intensity of American students' recourse to plagiarism, the present study attempts to portray such an intensity but as manifest in the Moroccan university context.

Presenting, Commenting, and Analyzing the Results of the Study

   1-   Defining the Target Population of the study:

As pointed out above, this study covered all ITU Semester Six students of the Department of English Studies, except those who did not attend classes on the survey days. This absence constituted a research constraint but it has not affected the sampling representativeness. Chart 2 presents the proportions of the respondents to the survey and even if it clearly shows the percentages of male and female informants, it should be noted that gender is not considered as a variable in this study. It is not an objective in this paper to demonstrate if male students commit or avoid online plagiarism more than their female counterparts and vice versa.

Group	Males	Females	Unspecified	Total
All S6 groups (3)	54	97	0	151
Percentage	35.8%	64.2%	0%	100%

Chart 2: Proportions of Male and Female Respondents.

A quite significant initial finding that sticks out of this empirical study is that female students outnumber their male mates almost twice, 97 and 54 respectively. However, this female quantitative predominance should not be understood as a female addiction to and/or male avoidance of online plagiarism. No such gendered connotations are meant to be supported by the statistics shown in chart 2. Thus, all what follows as results, commentaries, and analyses apply to all of the surveyed students regardless of their gender. These results, tabled below, will be organized in a coherently conceptual and analytical paradigm hoped to contribute in approaching, demystifying and solving the main causes, effects and consequences of online plagiarism among (under)graduates in Moroccan universities.

As this paper claims that plagiarism is a behavioral, ethical, educational, socio-cultural, psychological phenomenon, five focal points are suggested here to form the stream of analysis of the key findings and hence meant to serve as major stations for the whole data analysis process. Namely, these points are "intention, knowledge, awareness, education, and application". In other words, undergraduates are supposed to have a firm intention to abide by the rules of doing/writing research papers, to know these rules and techniques, to be fully

aware of their inevitability in academic/scientific research, and to educate and train themselves to apply them.

2- Delimiting the Research Prewriting Stage:

Under this heading, the respondents were asked if they make enough readings and take enough notes before they select their research topics (RTs, henceforth) and produce first drafts of their research paper (RPs, henceforth). The aim here is to know whether the students give enough importance to the prewriting stage in terms of preparing a working bibliography, reading it partially or wholly, and taking primary notes before they narrow down their RTs and draft their RPs. Results came as revealed in charts 3 and 4.

Those who made readings		Those who did not		Total
107	(70.9%)	44	(29.1%)	151 (100%)

Chart 3: Proportions of students who selected RTs after readings.

Those who took notes		Those who did not		Total
135	(89.4%)	16	(10.6%)	151 (100%)

Chart 4: Proportions of students who took notes before drafting RPs.

As demonstrated in these two charts, most respondents affirmed that they do read and take notes before they select their RTs and drat their RPs, but this affirmation remains questionable since the real amount of readings made and notes taken is not specified. Out of mere involuntary inattention, the survey did not cover this question of the exact or approximate amount of readings students make before they choose their final RTs and embark on drafting their RPs and does intend to include it in an upcoming work. So, although 70.9% of informants claimed to have prepared some sort of bibliography and made some literary review about their research areas, it can be interpreted that this claim needs more empirical verification since the real quantity and quality of readings were not specified, as it was pointed earlier. The remaining 29.1 %, also quite significant as a proportion, of the respondents who clearly affirmed their failure to review any readings before selecting RTs partially testifies to the need for further verification and reveals the hard truth of writing RPs without reading/reviewing enough previous literature. This penury of reading is claimed here as one of the major reasons behind the spread of plagiarism and the low quality of RPs submitted in partial fulfillment of the graduation requirements. The statistics to be presented later will testify to this interpretation.

In the same vein of argumentation, chart 4 shows that 89.4% of the informants take notes before they start to draft their RPs, while 10.6% did not. On a surface structure level, the majority of respondents claimed that students take notes to prepare their literary reviews, which are prerequisites in doing research in Social and Human Sciences. However, on a deep structure level, one can question the quantity and quality of this note-taking process because, as it is the case with the percentage 70.9% pointed out earlier to show if students read before they write papers, the proportion 89.4% seems to pale in significance when compared to the results to be presented later. In sum, the claims of reading enough references and taking enough notes before drafting RPs had better not be taken at their face-value but be investigated further in the light of the rest of the findings obtained in this research in order that the prewriting stage will be delimited in more concrete terms.

3- Measuring Students' Awareness of Plagiarism

Under this heading, the survey set out to measure the students' knowledge and awareness of plagiarism. So, they were asked a number of questions that concern their understanding, behavior, and commitment of plagiarism in order to dig more deeply in their conceptual, behavioral, and ethical views of it. To start with, the informants were asked to confirm or refute the axiomatic definition of plagiarism as mere intellectual theft. The question was plain and simple: do you agree that to plagiarize means to steal? The responses came as shown in chart 5.

Yes, to plagiarize is to steal.		No, it is not.		Total
141	(93.4%)	10	(6.6%)	151 (100%)

Chart 5: Proportions of students' conception of plagiarism as intellectual theft.

93.4% of the informants, the greatest majority, accepted that when students plagiarize they actually steal what others produced without giving them credit. Quite strangely, 6.6% of the surveyed students rejected the definition of plagiarism as a scientific/academic theft for unspecified reasons. Yet, as understanding and consciousness, it can be deduced that most Moroccan university students are convinced that plagiarism, online or offline, a phenomenon or a process, is opposite to intellectual, scientific, and academic integrity. This conviction is consolidated more clearly in the next chart which sums up the responses of the target population to another question that concerns breaching copyrighted works. The results are as follows in chart 6.

Yes, it is ethical to plagiarize.	No, it is not!	Total
3 (2%)	148 (98 %)	151 (100%)

Chart 6: Proportions of students' conception of the (un)ethicality of plagiarism.

To the exception of three informants, who think that plagiarism is ethical for unknown reasons again, 98% of them believe it is not. This quasi-total consensus reinforces the omnipresence of a conscientious studentship in Morocco when it comes to the belief in what is ethical and what it is not in the interlinked realms of academia and science. However, a pertinent question rises here to wonder why this ethical awareness does not translate into paramount avoidance of plagiarism. Chart 7 quantitatively translates this shortage of application and dire need for more educational sensitization. In this chart, the surveyed population was asked to honestly admit or deny if students plagiarize RPs. The admitters mounted to 62.3%; the deniers, 37.5%.

Students who admitted	Students who denied	Total
94 (62.3%)	57 (37.5%)	151 (100%)

Chart 7: Proportions of confession & denial of plagiarism.

After having almost two thirds of the informants, 62.3%, admitted students' recourse to plagiarism, it is clear now that this latter is quite prevalent among Moroccan university students despite their consciousness of its unethicality demonstrated in chart 6. Although there is no direct causal relation between this disclosure and the two previous assertions, manifest in the two quasi-consensual proportions of   93.4% and 98% figuring in charts 5 and 6 respectively, it can be noted that despite their quasi-total recognition that plagiarism means theft, only 62.3% of the respondents confessed that students plagiarize their RPs, and 37.5% refused to do so albeit most of them admitted that plagiarism is theft. Still, some of these refuters might have done so out of sheer oblivion of the practical meanings of plagiarism. This possibility might be sensed in the next chart which shows proportions of students who think that plagiarism can happen unintentionally.

The objective at this stage of empirical investigation was to test the hypothesis that plagiarism vacillates between being intentional and unintentional behaviors. While some students are claimed to plagiarize their PRs intentionally,   putting behind their backs the aforementioned studentship consciousness, academic conscience, scientific ethicality, and intellectual integrity, others purport not to have that intention when they happen to use others' material without proper documentation. Chart 8 clearly shows that a significant percentage of students, 57.6%, admitted to intentional plagiarism, while 42.4% played down this intention for different reasons one likeliest of which might be the lack/ignorance of or mere oblivion to proper documentation out of full volition at times or out of laziness and indifference at others. This point is well substantiated in chart 9, which presents the numerical value of the students' opinion about the possibility of avoiding plagiarism thanks to using documentation styles like MLA and APA.

Intentional	Unintentional	Total
87 (57.6%)	64 (42.4%)	151 (100%)

Chart 8: Proportions of plagiarism as being intentional or unintentional.

The statistics in chart 9 give an empirical understanding of why students plagiarize intentionally or unintentionally. The respondents were asked to clearly confirm or deny whether the use of MLA or APA as documentation styles enables students to avoid plagiarism.

Can it be avoided?	Can it not?	No answer	Total
57 (37.7%)	80 (53%)	14 (9.3%)	151 100%)

Chart 9: Proportions of (un)avoidance of plagiarism by means of documentation

Significantly enough, 53% of the informants denied this MLA or APA-based avoidance, while 37.7% of the target population affirmed it. It should be noted here that MLA, Modern Language Association, and APA, American Psychological Association, are mentioned here simply because both of them are the two most frequently used documentation styles which are traditionally taught in research methodology classes and deployed by students of English Studies in Moroccan Universities. Footnotes and endnotes are also used but not as frequently as MLA and APA.

Lack of knowledge, experience, and application of the rules and techniques of conducting scientific research crop up again as major reasons behind the denial of the undeniable role of documentation styles in doing research that is free from plagiarism. No scientific researcher and no B.A., M.A. or doctoral hopeful in Human and Social Sciences can be such a denier if they have a practical minimum awareness of the inevitable role of proper documentation in writing RPs. The proportion, 14%, of the abstainers who neither confirmed nor

denied the usefulness of MLA and APA in minimizing plagiarism, somewhat consolidates the claim of the students' unawareness of the importance of these documentation styles.

So, if one adds the abstainers to the deniers, both of their proportions, 14% and 53% respectively, amount to 67% of students who might consequently be said to have a defective conception of how to do research in general and/or how to properly cite sources in particular. This conceptual defectiveness also can be seen as one major reason behind the (under)graduates' perpetration of plagiarism. It can thus be deduced that although the students display an ethical awareness, as demonstrated in charts 5, 6 and 7 as well as in chart 10, they seem to have neither a tangible understanding of scientific research techniques/rules nor an unfailing readiness to practically respect and put them into effect. The next chart clearly shows that most of the respondents do not prefer to submit RPs that breach these rules and methods.

Yes to submit	No to submit	Total
15 (9.9%)	136 (90.1%)	151 (100%)

Chart 10: Proportions of students preferring (not) to submit plagiarized RPs

90.1% of the informants preferred not to submit their RPs if they are not written according to the rules and techniques of conducting scientific research. Again this reflects the *enormous* ethical awareness of students when it comes to express what should and what should not be done in their study programs. But the same question remains that this verbalized ethical expression does not often translate into the production of well written and thoroughly documented RPs, as it was demonstrated above.

Chart 10 shows that about 10% of the informants were frank enough to admit that they would prefer to submit RPs that transgress the ethics of proper research documentation. This, at a first reading, can mean that there are students who are ready to submit rule-unbound graduation B.A. monographs and since so why not M.A. memoirs and even doctoral dissertations. And there might be more students among that 90.1% majority who verbally denied unethical submissions but practically they might act otherwise. As a deduction that is based on all the previous empirical findings, one may safely affirm the presence of a deep gap between the ethical and practical sides of doing/writing RPs among Moroccan university students. So, what are the real causes and effects of this gap, which engenders plagiarism, according to the students themselves? Charts11 and 12 give an answer.

4-   Specifying The Causes and The effects of Digital Plagiarism
4.1 Specifying and Analyzing the Causes

Chart 11 shows that there are many interconnected causes of plagiarism perpetrated by students in Moroccan universities. All these causes were suggested to the respondents to choose which ones are more generative of e-plagiarism. The results came as shown in chart 11; every suggested cause was chosen by the informants a number of times to indicate its degree of frequency. The number eleven indicated in the table is merely used for organization purposes not for limiting the causes. Actually, every cause of these eleven ones can be a topic for a separate research, and this paper does not claim to research every one of them and delve deeply in their study and analysis. This undertaking goes far beyond its scope and analytical capacity, but it remains attainable in more work to come. This work considers those causes in their entirety and focuses on their degree of frequency in order to reflect the intensity of every cause in castigating the students to plagiarize their RPs.

	The Causes	Recurrences out of 151
1	Lack of reading	120
2	Low writing skills	120
3	Difficulty of doing research	84
4	Material shortage	52
5	Lack of interest and motivation	71
6	Lack of good supervision	58
7	Desire to get plagiarized work accepted	41
8	Shortage of time	94
9	Lack of awareness of destructive effects of plagiarism	58
10	Addiction & dependence on internet	86
11	Lack of an honest research tradition among students	51

Table 11: The causes of digital plagiarism and their recurrences.

To start with, 120 out 151 respondents, which is a significant majority, affirmed that the low reading rate and the subsequent bad writing skills, which seem to have become commonsensical traits among today's university students, are major causes of online plagiarism. This means that students who do not read well enough and have a low command of writing seem to make up for these fatal weaknesses by copying others' works in

different ways to secure an easier graduation. Still, plagiarizing RPs should not be understood here as an invariably direct result of the lack of reading and the poor writing skills; rather, these two serious problems are meant in this regard to be taken as two causes that can possibly lead to e-plagiarism. It should not be seen as an automatic tripartite relationship that goes: if you read less and write badly, you will plagiarize! More scientific research, especially in applied linguistics, should be devoted to the study of the vital and fundamental processes of reading and writing in order to advance new methods and strategies concretely useful in improving the reading rates and the writing skills, and by implication in minimizing instances of e-plagiarism.

The second strongest cause of online plagiarism, according to the surveyed respondents, is the shortage of time. 94 out of 151 stated that the time allotted to finish and submit a whole research project in full respect of the requirements is not enough, while the remaining informants, 57 out of 151, did not think so. Usually, time poses a problem for researchers, especially beginners; it pressures them with the deadlines set by the academic institutions where they belong or by their supervisors. However, no academic codes of ethics ease time encumbrances via recourse to plagiarism, print or electronic. Sound time management strategies are usually advanced and taught to students to succeed their study programs, including RPs. But it can be argued that time mismanagement leads to undesired results like plagiarized assignments. Yet, beside time shortage, there are other factors which the majority of respondents think of as causes of plagiarism, namely addiction or dependence on the Internet and difficulty of the research process.

86/151 and 84/151 of the informants affirmed that both the availability of the Internet and the hardships engendered by doing scientific research can lead to digital plagiarism, respectively. Based on these proportions and owing to the considerably large amounts of time most, if not all, students spend in the so-called virtual realm, they seem to have metamorphosed into "online dwellers" for whom the Net seems to have become a digital deus-ex-machina they invoke whenever entangled in/with assignments be them RPs or else.

In the same line of argumentation, lack of interest and/or motivation and lack of good supervision are cited by the surveyed population as two other causes of plagiarism. 71 respondents (circa 50%) admitted that many students do feel neither interested nor motivated to produce academically acceptable RPs and therefore make their shortcut to graduation via online copyright infringements. 58 informants, on the other hand, thought that supervisors do not guide students so adequately that the research process can become more easily doable. The validity of this thought needs to be tested in a separate work through empirically surveying the supervisors' feedback. The same number, 58 respondents, also admitted that the lack of awareness of the negative effects of e-plagiarism triggers the students' inappropriate quoting of original sources.

As shown in table 11, other causes of e-plagiarism are the shortage of research prerequisites, the absence of an honest research tradition, and the propensity of some students to get plagiarized RPs accepted by supervisors. These causes, although not supported by the majority of the informants, remain less tenable since in Humanities and Social Sciences a methodic combination of relevant references easily downloadable from the Internet and field surveys that are not too difficult to be carried out can produce academically acceptable research, which has accumulated a long and reliable tradition/experience so often maintained by professors who always warn against and reject plagiarism.

At this stage of analysis, it can concluded that lack of reading and low writing skills stick out as the biggest causes of e-plagiarism which has various effects.

4.2 Specifying and Analyzing the Effects

After having delimited and investigated some of the likeliest causes of online plagiarism in Moroccan universities, the paper turns to highlight and analyze its (plagiarism's) effects as seen by students themselves. Table 12 suggests a set of effects and displays their recurrences among the surveyed population, which reflects the degree of students' awareness of the negative consequences of e-plagiarism.

Effects	Recurrences
Production of incompetent graduates	100
Decrease in creativity & productivity	106
Further promotion of cheating in academia	72
Creating a generation of failed young academicians	85
Encouragement of BA holders to plagiarize MAs & PhDs	60
Lack of awareness of the need for genuine academic research.	68

Table 12: The effects of digital plagiarism and their recurrences.

The six effects itemized in table 12 are not the only effects online plagiarism is supposed to exert on its perpetrators. They are the effects hypothesized by this paper and affirmed by the survey respondents. There can be other impacts and consequences of online plagiarism, but this study does not account for them now and leaves it for more research to come.

To start with, over two thirds of the informants, 106 out of 151, stated that intellectual and scientific theft diminishes the creativity and productivity of students. Quite the same proportion, 100 out of 151, admitted

that this theft results in the production of incompetent students. In addition to this regrettable incompetence and the penury of creativity and productivity, which are cited by the surveyed informants as nullifiers of professional studentship to signify the need for academic professionalism, more than the half of the informants saw in digital plagiarism a promoter of more addiction to cheating and a creator of generations of failed young academicians, as demonstrated in table 12. Consequently, this promotion and this creation may culminate in the *encouragement* of students to plagiarize their research papers at the master and doctorate levels, especially as almost half of the surveyed population contended that the lack of awareness of the need to establish a genuine academic research tradition is another serious effect of e-plagiarism.

5- Specifying Further the Relationship between the Internet and Plagiarism:
All the causes and effects advanced and commented thus far were followed by two major questions about the Internet usage by the students to see to what extent the availability of e-sources triggers them to commit e-plagiarism. The first question the informants were asked was whether the Internet has made it easier for students to take material from online references without proper documentation.

84.1% of the respondents affirmed that the Internet has indeed facilitated plagiarism, as shown in table 13. It is obvious here that it is not the Internet as such but its users who, once abusive of its content, can be held responsible for the enactment of this facilitation. Giant search engines like Google seem to have become for plagiarists mere providers of material that they turn into undocumented papers, rather than online public data banks from where they can take what they need to produce decent work.

Yes		No		Total	
127	(84.1 %)	24	(15.9 %)	151	100%

Table 13: Has Internet made it easy for students to plagiarize?

In response to the second question, which asked the opinion of the informants about the irresponsible use of the Internet, 80.8% of them confirmed that the Internet is being inappropriately used by students, as demonstrated in table 14.

Yes		No		Total	
122	(80.8%)	29	(19.2%)	151	100%

Table 14: Is Internet being misused by students?

It is a majority confirmation that is quite similar to the one shown in table 13, 84.1% of the surveyed respondents admitting improper usage of Internet in a multiplicity of ways. 80.8% of the surveyed population plainly stated that students, in general, are not using the material they download from the Internet to write their RPs in conformity with the rules and standards of doing scientific/academic research. The colossal amounts of downloadable files, academic or otherwise, are not scanned, skimmed, selectively read, and properly cited but rather merely copied and pasted with slight modifications to minimize chances of detection either by academic wetware, i.e. professors, or anti-plagiarism software like turnitin.com.

Conclusion
This paper has set out to investigate the reality, causes, and effects of e-plagiarism as manifest in the Moroccan educational context in the light of similar empirical investigations carried out in American schools and universities. It has tested the two hypotheses and responded to the three research questions pointed out at its beginning.

Hypothesis one, which claims that ITU S6 research students may commit e-plagiarism out of ignorance of research documentation styles, was not supported since most of the numerical findings listed in charts 7, 8, 9, and 11 respectively demonstrate that 62.3% admitted to committing plagiarism, 57.6% confirmed its intentionality, 53% denied its avoidance by means of documentation, and over 70% (120/151) referred its main causes to low reading and writing skills. Hypothesis two, on the other hand, was supported in that 57.6% of the respondents affirmed students' intentional commitment of e-plagiarism (chart 8) because they lack the motivation, the interest, and the theoretical and practical abilities of doing/writing research (chart 11). These responses to the two hypotheses are therefore also answers to the two first research questions which interrogated the interrelated claims of ignorance and intentionality. As for the third research question, it tapped in the students' awareness of the causes and the effects of e-plagiarism to find that this consciousness is not absent in them, yet it is not always translated into practical avoidance of plagiarism, as demonstrated in charts 11 and 12.

One may therefore deduce that since consciousness is not constantly accompanied by application, more rigorous ways of education and training in research methodology should be conceptualized and operationalized without fault. Internet literacy and computer-mediated research methodology (IL and CMRM) should be consolidated more than ever before as two compulsory courses in the curriculum of English Studies with a view to instilling the inevitability of operationalizing these two subjects in unison with codes of ethics strictly prohibiting and unfailingly punishing transgressions.

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