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Information Literacy, Social Media and Academic Achievement at Higher Education

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Abstract

This study was conducted to investigate the effect of social media usage on information literacy skills and on the academic achievement of second year Master students of English at Frères Mentouri Constantine1 University. It aims at examining the relationship between students' information literacy competencies and their use of social media. It also attempts to find appropriate methods to measure the study variables: social media usage, information literacy skills and academic achievement. Two questionnaires are used as research tools: one administered to a random sample of 78 students and another one to 16 of their research supervisors. The analysis of the data partly confirms our hypotheses that social media usage would not guarantee the acquisition of the necessary information literacy skills, and that improvement in information literacy performance would enhance students' academic achievement.

Keywords: Information literacy competencies; social media; academic achievement; higher education; new literacy studies

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Résumé

Cette étude vise à étudier l'effet de l'utilisation des médias sociaux sur les compétences informationnelles et sur la réussite scolaire des étudiants de deuxième année de Master d'anglais à l'Université Frères Mentouri Constantine1. Il vise à examiner la relation entre les compétences des apprenants en matière de maîtrise de l'information et leur utilisation des médias sociaux. Il tente également de trouver des méthodes appropriées pour mesurer les variables: l'utilisation des médias sociaux, les compétences informationnelles et la réussite scolaire. Deux questionnaires sont utilisés dans cette étude: un administré à un échantillon aléatoire de 78 étudiants et un autre à 16 de leurs directeurs de recherche. L'analyse des données confirme en partie nos hypothèses selon lesquelles l'utilisation des médias sociaux ne garantirait pas l'acquisition des compétences nécessaires en matière de maîtrise de l'information, et que l'amélioration des performances de maîtrise de l'information améliorerait la réussite scolaire des élèves.

ملخص

أجريت هذه الدراسة لمعرفة تأثير استخدام وسائل التواصل الاجتماعي على مهارات الوعي المعلوماتي و التحصيل الأكاديمي لدى طلاب السنة الثانية ماستر في قسم اللغة الإنجليزية ، جامعة الاخوة منتوري ، قسنطينة 1. يهدف البحث إلى دراسة العلاقة بين مهارات الوعي المعلوماتي لدى الطلاب واستخدامهم لوسائل التواصل الاجتماعي. تحاول الدراسة أيضًا إيجاد طرق مناسبة لقياس متغيرات الدراسة: استخدام الوسائط الاجتماعية ، مهارات الوعي المعلوماتي و التحصيل الأكاديمي. تم استخدام استبيانين كأدوات بحثية: وزع الاول على عينة عشوائية مكونة من 78 طالب ماستر بقسم اللغة لإنجليزية بينما وزع الآخر على 16 من الاساتذة المشرفين على أبحاثهم. يؤكد تحليل للبيانات فرضياتنا بأن استخدام وسائل التواصل الاجتماعي لن يضمن اكتساب الطلاب مهارات لوعي المعلوماتي اللازمة ، وأن تحسين أداء الطلبة في مهارات الوعي المعلوماتي من شأنه أن يعزز التحصيل الدراسي للطلاب.

الكلمات المفتاحية: مهارات الوعي المعلوماتي ؛ مواقع التواصل الاجتماعي ؛ التحصيل الاكاديمي ؛ التعليم العالي

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Introduction

An estimated number of 4.38 billion people around the world use the Internet; among them, 3.48 billion are social media users, and the majority of them are young people aged between 18 and 29 (hotsuite.com, 2019). Thanks to the advancements brought by the Web 2.0 technologies, information is abundantly available on the Internet nowadays. Moreover, social media websites provide opportunities for their users to create and share information with various virtual communities. Internet use and, precisely, social networking, is undoubtedly a global phenomenon that is worth investigating. In the context of higher education, the availability of the Internet may be considered a blessing for students who can now access information easily and quickly. However, it might also make them feel lost in front of the endless sources of information they encounter on the web. Therefore, their academic success depends on the acquisition of skills which go beyond the assimilation of information; critical evaluation of existing content is highly required, and academic achievement requires from students to acquire information and digital literacy skills to be able to access and evaluate online sources and to legally and ethically use these sources (Swansea University, Information Services and Systems, 2013, pp. 2, 3). This paper explores the relationship between social media usage, information literacy and academic achievement of second year Master students at Frères Mentouri Constantine1 University .

1. Literature Review

1.1. From Literacy to Literacy Practices

Most researchers concerned with literacy studies (Freebody &Welch, 2005; Kern, 2000); Pahl and Rosell, 2005; Torone, Biglow & Hansen, 2009; McCaffery, Merrifield & Millican, 2007; Cooke & Simpson, 2008; Leu et al, 2013) agree that there has been a shift in understanding and defining the term 'literacy'. The discipline named New Literacy Studies was introduced in the late 20th century to mark a shift from the study of literacy as grounded in abstract theoretical studies to the daily uses of literacy in particular settings (Freebody & Welch, 2005, p. 6). With this in mind, these scholars recognised that literacy shapes and is shaped by the cultural and ideological manifestations in which it takes place, challenging the view that literacy is a set of "discrete" skills that can easily and innocently be taught, measured and transported from one setting to another.(Freebody & Welch, 2005, pp. 6-7-8)

Not only the definition of literacy has changed, but its scope has also been widened with the recent developments in modern technologies. McCaFerry, Merrifield and Millican (2007) affirmed that the meaning of the term 'literacy' has evolved significantly from its original one, which referred, in simple terms, to reading and writing skills. Moving from a basic ability of writing one's own name, literacy involves nowadays a wide range of abilities related to the social and technological development. For instance, computer literacy refers to being able to perform daily tasks using the computer; political literacy is concerned with knowing how a given political system functions and how to be an active participant in it. An example of such an expansion in the use of the word literacy may be found on the web in various fields such as: environmental literacy, information literacy, media literacy, financial literacy, science literacy, emotional literacy, etc. (McCafferry, Merrifield & Millican, 2007, pp. 32-35). This also marks the transition from 'literacy' used in the singular form to the idea of 'multiple literacies' as the ones mentioned above.

1.2. Information Literacy

The concept of 'information literacy', which is part of what is known as 'multiple literacies', became significant with the recent developments in information technologies and the World Wide Web (The Association of College and Research libraries, 2000, p. 2). Never before has information been so abundant and diversified; therefore, the acquisition of skills to access, evaluate and use information effectively

has become crucial in different settings and mainly in academic contexts. The diversity of information sources as well as its 'unfiltered' quality poses concerns for its "authenticity, validity and reliability." Moreover, the fact that information is abundantly available does not assure the creation of informed individuals if these do not possess the necessary skills to manage information (The Association of College and Research libraries, 2000, p. 2)

Within this context, information literacy became the foundation for "lifelong learning" in all disciplines at all levels and the guarantee for learners' autonomy and self-monitoring. (The Association of College and Research Libraries, 2000, p. 2) The Association of College and Research libraries (2000) defined information literacy as "a set of abilities" concerned with effective access, evaluation and use of information. It its attempt to measure information literacy at higher education, the association put forward a list of competencies to be developed by an individual to be information literate:

- determine what and how much information is needed;
- effectively access the needed information;
- assess both the information and the source from which it is retrieved in a critical manner;
- select appropriate information to integrate it with one's own 'knowledge base';
- employ information successfully to achieve a given purpose;
- show understanding of the different aspects of information: economic, legal and social in order to use it ethically and legally. (pp. 2-3)

1.3. Information Literacy and Social Media

The Internet, and particularly social media, are affecting all aspects of life in the 21st century. As Leu et al (2013) put it: "Never in the history of civilization have we seen a new technology adopted by so many, in so many different places, in such a short period of time, with such powerful consequences for both literacy and life." (p. 1159). Thus, it is significant for educators and researchers at higher education to investigate the impact of using these new means of acquiring information on students' information literacy.

Social media or social networking websites are defined as "virtual" communities where internet users can create, evaluate and share information with other members of the community. This includes the possibility to create profiles, make a friend list and interact with friends on the same networking site. (Kuss & Griffiths, 2011, p. 3529)

With all these offered services, researchers (Fernandez &Villavicencio, 2010, Leu et al., 2013; Penzhorn, 2013; and Aillerie & McNicol, 2016) stated many reasons why social media should be the vehicle to teach information literacy. These can be summarized as follows:

- The Internet has become a defining feature of the term 'literacy'; thus, the latter cannot be taught appropriately with archaic tools that do not consider how literacy is shaped by new forms of communication. Nevertheless, traditional literacy skills, namely reading and writing skills, should remain as 'foundational' skills for new literacies (Leu et al, 2013. p. 1159).

- It would be so difficult to teach 21st century literacy skills (communication, cooperation, creativity, critical thinking and problem solving) without the use of social networking sites which involve employment of all the previously mentioned skills. (Aillerie & McNicol, 2016, pp. 94- 95).

- Whether we like it or not, students are already using social networking sites to search for and share information; so it is necessary to teach them skills that would enable them to analyse information coming from these sites critically (Aillerie & McNicol, 2016, p 95). This is why more and

more institutions are using Facebook, for instance, to teach information literacy. (Fernandez &Villavicencio, 2010, p. 65).

- Because collaboration and information sharing are at the core of social media use, using social networking sites would promote the students' sense of collaborative work, which would even have a positive impact on their future careers. (Penzhorn, 2013, p. 62).

1.4. Information Literacy and Academic Achievement

Before investigating the effect of information literacy on academic achievement, it is essential to define what is meant by academic achievement and, more importantly, how it can be measured. Generally referred to as academic achievement, academic success or academic performance in the literature (Salleh et al, 2011; Mohagheghzadeh et al, 2014; Soleymani, 2014; York, Jibson &Rankin, 2015), it is a construct that remains ambiguously used as it can include a wide range of students' "outcomes" ranging from attaining a degree to acquiring moral development (York, Jibson & Rankin, 2015, p. 1). One reason for this ambiguity is that different stakeholders may view it differently. For instance, while a university teacher would consider academic success as the "acquisition of specific knowledge and skills demonstrated through completion of courses", an administrator might disagree with this definition, viewing academic achievement in terms of a graduate's ability to engage and progress in a profession that is linked to their academic degree (York, Jibson &Rankin, 2015, p. 1).

Despite the complexity of the term academic achievement, most studies that dealt with the impact of information literacy on academic achievement (for example, Salleh et al, 2011; Mohagheghzadeh et al, 2014; Soleymani, 2014) measured academic achievement in terms of students' general averages obtained in the courses under investigation. However, because the context in which it is perceived is important to define what is meant by academic achievement, this concept and its measuring methods need further investigation.

Studies that investigated the impact of information literacy on academic achievement tended to confirm the hypothesis that acquiring information literacy skills would have a positive impact on students' academic achievement. For example, a study undertaken by by Salleh et al (2011) at a Malaysian public university found a significant effect of information literacy level on senior undergraduate students' general averages. In another research on medical students at Isfahan University, Iran, Soleymani (2014) found a positive correlation between students' information literacy performance and their academic achievement, which he also measured by calculating students' average scores at previous semesters. Furthermore, a more recent study by Anandhalli (2018) on students of Anjuman Arts, Commerce and Science Degree College, Vijayapura. India, revealed that not only information literacy has a significant impact on students' academic performance, but that it was the most influential variable among other factors such as gender and geographical area.

2. Methodology

This study is exploratory; therefore, it employs the questionnaire as a research tool. Two questionnaires were administered: one to a sample of students (78 second year Master students) and another to a sample of 16 teachers who have at least five years of experience in supervising and examining Master research works. Through the students' questionnaire, the participants provided information on their use of social media while through the teachers' questionnaire, the respondents expressed their opinions on how to define and measure academic achievement. Furthermore, both students' and teachers' questionnaires include a second section where participants are asked to rate students' information literacy competencies on a five-point scale. The aim from this section is to compare the ratings of both students and teachers of the information literacy competencies, on the one hand, and to check the correlation between the use of social media by

second year Master students and the extent to which they believe they are information literate, on the other hand.

2.1. Description of the Students' Questionnaire

The students' questionnaire includes two sections. In the first section, students are basically asked to give information on the use of social media in their daily life. It includes seven questions that aim at checking the availability of the Internet and the new technology devices for students on a regular basis as well as the frequency and the purposes for which they use social media. The second section is concerned with the students' rating of their information literacy skills which are divided into five main competencies as described in the *Information Literacy Competency Standards for Higher Education* initiated by both the American Association for Higher Education (1999) and the Council of Independent Colleges (2004). A five-point scale is proposed to help them give appropriate rates to the different skills. The results obtained from the students' responses in both sections would allow us to have an idea on the relationship between students' use of social media and the extent to which they think they are information literate.

2.2. Description of the Teachers' Questionnaire

Similarly, the teachers' questionnaire also includes two sections. Five questions in Section One probe for information on their attitudes about what makes a good Master dissertation as well as their own understanding of the dependent variable of the study: academic achievement. A list of research aspects is displayed so that teachers would tick the ones they think are important in the evaluation of Master dissertations and an open-ended question is left for them to add any other aspects they think are missing on the provided list. They are also asked to give a rate out of twenty for each aspect in terms of its importance to judge the quality of the Master dissertations that they examine. This would help us design a grid for evaluating students' dissertations based on the teachers' criteria. Furthermore, this section poses a question on whether supervisors believe that writing a good Master dissertation is a good indicator of the concept of academic achievement. A final question requires the teachers to define what academic achievement means to them. This would help us check the validity of our operational definition of academic achievement at the Master level, being conceived as the ability to successfully write a dissertation that meets the Master research requirements. Section Two concerns teachers' evaluation of their second year Master students' information literacy skills. This would allow us to know the teachers' attitudes about the extent to which their students are information literate and to check whether the students and their supervisors have similar attitudes towards their information literacy skills by comparing students' and teachers' ratings of the same competencies.

3. Results

The analysis of the data obtained from both the students' and teachers' questionnaires provided interesting insights about the students' digital orientations, information literacy competencies and academic achievement. We, respectively, present the main findings of this study.

3.1. Analysis of the Students' Questionnaire Results

The analysis of the data based on the students' responses provided information on the students' use of social media for different purposes as well as their self- rating of their own information literacy competencies. Results are summarised as follows.

- **Access to the Internet**

When asked how many days per week they have access to the Internet, more than half the respondents (66.67%) answered that they have daily access to the Internet, about 18% have access to it most days of the week (4 to 6 days) while only a minority (about 12%) can access it for 3 days or less per week. This shows that the Internet has become a necessary commodity in most Algerian households, and we can infer that students who have less regular access to the Internet are those who live away from their homes and who might not be able to afford the cost of purchasing the Internet on a regular basis. Only one student answered that s/he did not have access to the Internet during all week days. These results can be very encouraging for instructors who would like to engage their students in activities using the Internet as almost all of them can at least access the web once a week.

Options	Number	Percentage
0 day	1	1.28
1 day	1	1.28
2 days	6	7.69
3 days	2	2.56
4 days	6	5.13
5 days	5	6.41
6 days	5	6.41
7 days	52	66.67
Sum	78	100

Table 1: Students' Access to the Internet

- **The Electronic Devices Used for Internet Connection**

As access to the Internet is important to be part of the virtual community, having the appropriate electronic device is an obvious necessity. Asking the students to inform us about the devices they use to connect to the Internet, 70.52% ticked more than one device whereas only 29.48% use only one device for their internet connection.

Number of Devices	Number	Percentage
1 device	23	29.48
2 devices	47	60.26
3 devices	8	10.26
4 devices	0	0

Table 2: The Number of Electronic Devices used for Internet Connection

As for the device which is most used by our respondents, the smartphone came first with 82.28%, followed by the personal computer with 63.29%, and the tablet was ranked third with almost 14%. A minority of students (probably those who do not possess computers or smart devices at home) use devices in public places like cyber spaces and libraries. Needless to ask them about the reasons for their preference of the smartphone; the latter has proved to be the favourite device for connecting to the web because of its easiness to handle, its relatively reasonable price and the multiple services it offers. This may make teachers suffering from lack of educational technology in their classrooms, namely computers, think seriously about integrating smartphones to teach aspects of their lessons which require Internet connection. The following tables specify both the number and the type of electronic devices used by the students to connect to the Internet.

Electronic Devices	Number	Percentage
a. smartphones	65	82.28
b. laptop computers	50	63.29
c. Tablets	11	13.92
d. Devices in Public Places	14	17.72

Table 3: The Types of Electronic Devices used for Internet Connection

- **Frequency of Social Media Usage**

It has been found that most respondents who use the Internet connect on social media. In fact, more than three quarters of the participants always or often connect on social media when they are online, about 25% are less frequently connected, and only one respondent never visits social media websites. These results support the already existing view about young people's and especially students' obsession with social networking websites (commonly known as social media).

Frequency of Media Usage	Number	Percentage
a. Always	41	52.56
b. Often	19	24.36
c. Sometimes	10	12.82
d. Rarely	7	8.97
e. Never	1	1.28
Sum	78	100

Table 4: The Frequency of Social Media Usage

This has been further confirmed through the data obtained from their responses to the questions of how many days per week they visit these websites and for how much time. About 75% connect on social media websites six or seven days a week, about 15% are regularly connected, 3 to 5 days a week, and the remaining 10% connect for just one or two days a week.

Number of Days	Number	Percentage
1	2	2.56
2	7	8.97
3	4	5.12
4	6	7.69
5	2	2.56
6	8	10.25
7	49	62.82
Sum	78	100

Table 5: Students' Connections to Social Media per Week

The fact that these websites provide easily and quickly a wide range of services and options is obviously behind the students' addiction to social media. In fact, 52.56% of the respondents spend from 3 to 10 hours a day connected to social media, about 10% spend more than 10 hours and only 28% use 1 to 2 hours.

Time Spent on Social Media	Number	Percentage
Less than 1 hour	7	8.97
1-2 hours	22	28.20
3-10 hours	41	52.56
More than 10 hours	8	10.26
Sum	78	100

Table 6: The Daily Time Spent on Social Networking

These findings come in accordance with what Kuss and Grifiths (2011) described as an increasing potential for addiction which is attributed to the time spent on social networking sites, i.e. the more time spent on social media, the higher the risk of addiction. While evidence on the impact of this on the students' academic achievement is not yet confirmed, the results are alarming to educational systems which still use traditional methodologies and materials in teaching at higher education. Educational systems should invest in the increasing exposure of students to social media in favour of developing students' knowledge and academic skills instead of letting them be lost in the wide digital world. For instance, as far as language teaching

is concerned, this means that if students, in their daily practices, view language through the 'electronic medium', they should not be taught only via printed texts (Pahl & Rawsell, 2005, p. 4) (tables 4, 5 and 6 provide a detailed account of social media usage among the respondents).

- **Most Visited Social Media Websites by Students**

Many social media websites are competing nowadays to have the largest number of subscribers. YouTube, Facebook, Twitter, Instagram and others have taken the lead of the web for the last decades, and new websites appear every day with more options and services. When investigating the most widely used social media websites among the students, we found out that about only 18% adhered to one website. On the other hand, the majority of the respondents seemed to visit two or three websites (more than 60%), and a minority of about 20% preferred more variety and shifted between four or five social media.

Number of Visited	Number	Percentage
1 website	14	17.95
2 websites	24	30.77
3 websites	25	32.05
4 websites	12	15.38
5 websites	3	3.85
Sum	78	100

Table 7: The Number of Visited Social Networking Websites

As for the most popular website among students, YouTube came on top with 83.33%, followed by Facebook with 79.49%, and Instagram was ranked third with 64.15%. Twitter and Whatsapp were found far less visited by students with a percentage of approximately 7%. However, 28% have mentioned other websites that were not provided on the list of options such as LinkedIn. The numbers above provide evidence for the students' openness to the virtual world; they are familiar with most websites that are known internationally, and they tend to try out different and new websites whenever they appear. As a result, teaching at the level of university should keep up with this rapid change in literacy practices of the students outside of the classroom. Social media have become part of the students' social life, and it is high time they become part of their educational life as well. Table 8 names the most visited websites consulted by the students:

Social Media Websites	Number	Percentage
a. Twitter	6	7.69
b. Facebook	62	79.49
c. Instagram	36	64.15
d. Whatsapp	6	7.69
e. YYouTube	65	83.33
f. Other	22	28.21
Sum	78	100

Table 8: The Most Visited Websites by Students

- **The Purposes for which Students Use Social Media**

Today, people use social media for a variety of purposes, and the scope of such uses is widening every day. As what has been found about the number of social media websites students use, the purposes proved to be equally varied. Only about 9% of the sample use social media for a single purpose. The remaining 91% visit social media websites for multiple purposes ranging from two to six, which shows how social media seem to affect different aspects of students' lives.

Number of Purposes	Number of Users	Percentage
1 purpose	7	8.97
2 purposes	12	15.38
3 purposes	18	23.08
4 purposes	25	32.05
5 purposes	9	7.69
6 purposes	7	8.97
Sum	78	100

Table 9: Students' Number of Purposes of Social Media Usage

It is no surprise that the majority of students (66.66%) use social media to perform academic tasks or to get into contact with their classmates and teachers. In a second position, students use social media to get informed about general topics or to get entertained (with rates reaching 65% and 64% of the sample respectively). More than half the sample use social media for online communication with different people, and nearly a quarter use them to express their opinions on different issues related to their community and the world. A small number of the respondents (2.56%) have opted for other purposes, and they have named online shopping. In fact, these findings can be considered very promising as to the future of integrating modern technologies in higher education; since in practice they are already part of students' academic life, social media should not be waiting for too long to become officially and pedagogically an integral part in the teaching/learning process at higher education As table nine provides information about the number of purposes for using social media, the table below names those purposes and indicates the number of students for each purpose.

Purposes of Social Media Usage	Number	Percentage
a. Communicate with different people	42	53.85
b. Get informed about general topics	51	65.38
c.Perform academic tasks	52	66.67
d. Communicate with classmates and teachers	52	66.67
e.Express opinion about different community and world	19	24.36
f. To get entertainment	50	64.10
g. Other	2	2.56
Sum	78	100

Table 10: Students' Purposes of Social Media Usage

- **Information Literacy Competencies: Self-rating**

The students' self-rating in matter of literacy competencies indicates that the participants have a fairly positive attitude towards their information literacy competencies. For instance, 62.34% believe that they are good or very good at identifying the nature and the extent of information they need for a given task (C1), and 32.47% think they have an average competency; on the other hand, only 5.19% think they are weak at this competency, and none of them has qualified themselves as very weak. These results are fairly similar to the second competency (C2) which is the ability to access the required information effectively and efficiently and the fourth competency (C4) which is using information individually or as a member of a group to perform a given task. However, the respondents are less confident with the third competency (C3), being able to evaluate the information and its sources critically and incorporate selected information into one's own knowledge base and value systems; and the fifth competency (C5), being able to understand many of the economic, legal and social issues surrounding the use of information and access and to use information ethically and legally. The number of students who rated themselves as being weak or very weak at these two competencies was found to be higher with a percentage that goes up to 30% of the sample (see table 11 for more details).

Competencies (C)		V. Weak	Weak	Average	Good	V. Good	Sum
C1	**N**	0	4	25	29	19	77
	%	0%	5.19%	32.47%	37.66%	24.68%	100%
C2	**N**	2	10	17	35	13	77
	%	2.58%	12.99%	22.08%	45.45%	16.88%	100%
C3	**N**	5	12	20	28	12	77
	%	6.49%	15.58%	25.97%	36.36%	15.58%	100%
C4	**N**	1	5	20	35	16	77
	%	1.30%	6.49%	25.97%	45.45%	20.78%	77
C5	**N**	4	19	19	22	13	77
	%	5.19%	24.68%	24.68%	28.57%	16.88%	100%

Table 11: Students' Self-rating of their Information Literacy Competencies

The previous observations are further made obvious by calculating the average scores of the students' rates for each competency and for their overall competency in information literacy. As the table below indicates, C1, C2 and C4 have fairly similar averages, and the three of them are labelled 'good' with reference to the scale used to evaluate the competencies, whereas C3 and C5 received the lowest rates with an average label. In fact, the selection of these two competencies as being the weakest for the students may point to lack of critical thinking on the part of the students which would enable them to determine the accuracy of the information they have at hand. It also refers to the students' lack of awareness of the legal and ethical issues related to the use of information for their academic tasks, which may be one of the reasons why plagiarism has become so prevalent in students' research works. This seems to be confirmed by an earlier study which dealt with Applied Language students at Frères Mentouri Constantine 1 University (Beghoul, 2014). In fact, most students who participated in this study knew about plagiarism but disregarded its ethical and legal aspect which helped spread this negative phenomenon among them.

Competencies	Mean	Label
C1	2.71	Good
C2	2.51	Good
C3	2.35	Average
C4	2.64	Good
C5	2.30	Average
Overall Score in Information Literacy	12.55	Good

Table 12: Students' Average Rating of their Information Literacy Competencies

- **The Correlation between the Use of Social media and Attitudes towards Information Literacy Competencies**

In order to find whether there is a relationship between the extent to which students engage in social networking and how well they think they are information literate, we calculated the correlation between the amount of time spent on social media (expressed in terms of hours and minutes per day) and their self- rates of information literacy. The results show no significant link between the variables with a coefficient of correlation that equals almost 0 (r=0.04). This partly confirms our hypothesis that students' exposure to electronic information does not guarantee mastery of the necessary skills to handle it; in this case, students' positive attitudes towards their information literacy competencies may not be attributed to the fact that they spend a lot of time on social networking. In other words, the confidence they have about their ability to access and use information appropriately is not related to the quality of being

social media users. Therefore, other reasons such as they having been taught most of the competencies mentioned in the questionnaire in undergraduate and Master research methodology courses may be behind their relatively high ratings. The scattered points in the figure below illustrate the absence of a link between the time spent in social networking and the students' self- ratings.

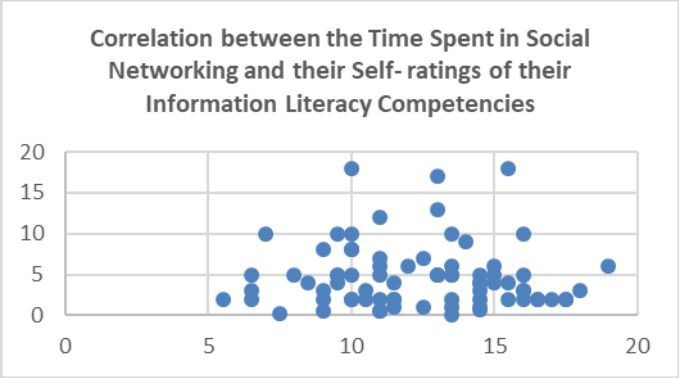

Figure 1: The Correlation between the Time Spent on Social Networking and the Self-rating of Students' Information Literacy Competencies

3.2. Results of the Teachers' Questionnaire Analysis

- **Criteria for Evaluating the Master Dissertations**

Writing a dissertation is an indispensable requirement for a student to get the Master's degree within the LMD system in Algeria. In fact, it constitutes a major part of the Master studies in Algeria where one semester, among four, is devoted to preparing, writing and defending Master dissertations. Thus, successful completion of this task plays an important role in the students' academic performance, and understanding the criteria for evaluating the Master research works is crucial in measuring the students' academic achievement at this level.

Among the 16 teachers at the Department of English, Frères Mentouri Constantine1 University , who agreed to answer the questionnaire, 14 of them ticked the three cited criteria: Content, Form and Methodology to be important criteria for the evaluation of Master dissertations whereas two teachers excluded the parameter of Content, giving importance to only form and methodology. In addition, when asked to add any further criteria they believe are important, nine teachers did not add any, thinking the three cited criteria were sufficient to evaluate adequately Master dissertations. On the other hand, seven respondents added other criteria they take into account in their evaluation. These can be cited as follows:

1. Research format conventions
2. The defence of the dissertation (viva voce)
3. Students' ability to synthesise, paraphrase and summarise knowledge taken from sources
4. The candidate's clear understanding of the variables and the choice of the tools of research
5. Mastery of the technical terms used in the research
6. The circumstances in which the dissertation is written (pressure of time, etc.)
7. A good linkage and continuity between the research questions, the method used and the final results

In fact, careful examination of the above mentioned criteria allows us to consider most of the added criteria under one of the large headings of Content, Form and Methodology; however, the teachers may have set them apart because of their significance for them. For example, criterion1 can be classified within Form, criteria 3, 4, 5 and 7 are, in fact, aspects related to Methodology; nonetheless, the second and the sixth criteria, the viva voce and the conditions in which the research is conducted could be set apart as independent criteria. It could be deduced, therefore, that teachers do not disagree about the broad headings of form, content and methodology being the most important criteria for evaluating Master research works, but they allocate special importance to certain sub skills that are included within the three general criteria of evaluation.

- **Teachers' Proposed Scales to Evaluate Master Dissertations**

Although most teachers agreed on the criteria that should be taken into account when assessing the quality of Master dissertations, the value they gave to each criterion was not similar. While four teachers preferred to add the oral presentation to the scale and gave it an equal value to the other criteria, one teacher gave layout equal points (5 points) with each of the previously mentioned aspects, and the remaining eleven teachers preferred to give a higher value to one of the aspects at the expense of the others. Some of them favoured content; others preferred form and a third group gave methodology the highest number of points. It can be deduced from the divergent scales proposed by the teachers that the process of evaluating dissertations depends partly on the teachers' subjective views of what aspect(s) determine(s) best the quality of a research work. This seems inevitable in the absence of standard criteria that are agreed upon by all supervisors and examiners at the department of English. The extent to which these divergences in views can influence students' final marks of their Master dissertations poses a real problem concerning the evaluation of students' academic achievement (it is noted that the mark obtained for the dissertation represents 50% of the annual results for each student). The significance of these findings for the present research work is that the mark obtained for the Master dissertation cannot be a reliable indicator to measure the academic achievement of second year Master students. If it intends to be so, then all dissertations should be evaluated according to the same standard criteria.

- **Measuring Academic Achievement: Teachers' Attitudes**

Before asking the teachers to provide us with their opinions about how to best measure Academic Achievement, they were asked to answer the question on whether the ability to write a good Master dissertation was a good indicator to measure Academic Achievement. The aim from this question is to check the validity of our own operational definition of Academic Achievement at the final year of Master studies being the students' ability to write a good Master dissertation. Among the 16 teachers who answered the questionnaire, five (31.25%) agreed with this while the majority of them (68.75%) disagreed, believing that the ability to write a good Master dissertation is not sufficient to measure the students' academic performance. Attempting to explain this attitude, they were asked to mention any other indicators that should be taken into account to assess appropriately the students' Academic Achievement. The indicators that the teachers suggested are listed below:

- The other modules are equally important;
- Continuous and regular assessment;
- Students' oral presentation of the dissertation and their ability to answer questions about it in a satisfactory manner;
- Students' attitudes in the phase of preparing for the data (to choose a good topic, to design an acceptable research work, to suggest a meaningful hypothesis;
- Other requirements that are covered in the courses of Semester3 (content to be mastered, skills that may or may not show up in the dissertations;
- Students' knowledge of the world (including different disciplines related to their specialised knowledge);

- A long-term evaluation relative to different aspects of their knowledge in their discipline;
- Interdisciplinary knowledge; an objective evaluation of the students;
- In their academic terms (semester1+ semester2), writing+ oral activities are imperative
- Working effectively within a team;
- Having effective communication skills;
- Applying knowledge to actual situations;
- Integrating a value system in their own life (in studies);
- Mastering the subject matter;
- To have acceptable writing skills.

In fact, a watchful analysis of the teachers' responses would allow us to understand their reluctance to approve the ability to write good dissertations as an appropriate indicator to measure the academic achievement of Master students. The conditions in which the process of working on Master research works largely contribute to this; students have only one semester (about 5 months) to finish working on their dissertations. Moreover, teachers, acting as both supervisors and examiners have to direct and examine a large number of research works (four or more) within the same limited period of time; this certainly does not allow the teachers to be fully engaged in the research process, and, consequently, it would be very difficult for them to judge whether the final versions of the dissertations reflect the students' real academic performance.

That is why most of them suggested other indicators such as continuous assessment of students' performance in all exams to give a better evaluation of the students' academic achievement and considering the oral performance of students during the viva in order to directly assess the students' mastery of the topics on which they have been working. Apart from these, however, most of the indicators that have been listed by the teachers can actually be seen in the students' dissertations; these include, for instance, mastery of the topic, the students' writing skills, the students' ability to synthesise information and their ability to integrate knowledge into real life tasks. In fact, the latter, being able to integrate the students' knowledge into real world tasks, is one of the most important competencies that should be developed as a result of receiving higher education. Thus, the students' research works are supposed to reflect the skills and competencies they have acquired during their five years of learning at university even though, in practice, this does not seem to be the case. As a conclusion, a comprehensive definition of academic achievement at the final year of the Master course can be done by combining the written and oral presentation of their research works as well as the results they have obtained in the other subjects.

- **Teachers' Evaluation of the Students' Information Literacy**

A simple glance is sufficient to notice that the teachers' rates of the students' information literacy competencies are lower than those provided by the students (the table below indicates that most teachers have rated their students to be weak at the five information literacy competencies). While they gave an average level to the two first competencies, determining the nature and the extent of the information they need for a given academic task and accessing the needed information effectively and efficiently with 53.33% of the respondents, the three other competencies were in most cases rated as being weak or very weak. This is especially true for C4, the ability to use information, individually or as a member of a group, effectively to accomplish a specific purpose. For this competency, 80% of the teachers qualified their students to be weak and only 20% as being average. As has been noticed with students' ratings, C3 (concerned with students' ability to evaluate the information and its sources critically and to incorporate selected information into their own knowledge base and value systems) and C5 (the ability to understand many of the economic, legal and social issues surrounding the use of information and can access and use information ethically

and legally) received the lowest rates with more than 80% of the respondents describing their students to be weak or very weak.

Competencies		Very Weak	Weak	Average	Good	Very Good	Sum
C1	**N**	0	7	8	0	0	15
	%	0	46.67	53.33	0	0	100
C2	**N**	2	5	8	0	0	15
	%	13.33	33.33	53.33	0	0	100
C3	**N**	5	8	1	1	0	15
	%	33.33	53.33	6.67	6.67	0	100
C4	**N**	0	12	3	0	0	15
	%	0	80	20	0	0	100
C5	**N**	3	9	3	0	0	15
	%	20	60	20	0	0	100%

Table 14: Teachers' Rating of their Students' Information Literacy Competencies

The calculation of the teachers' average ratings of the five competencies and the overall information literacy competence shows clearly the teachers' general dissatisfaction with their students' information literacy levels. The average rate for each of the five competencies was found to correspond with the label 'weak' as the table below shows:

Information Literacy	Average	Label
C1	1.73/4	Weak
C2	1.5/4	Weak
C3	1.2/4	Weak
C4	1.5/4	Weak
C5	1.33/4	Weak
Overall Score in	7.16/20	Weak

Table 15: Teachers' Average Rating of their Students' Information Literacy Competencies

4. Discussion

The students' questionnaire revealed that almost all the participants were internet and social media users, some of which can even be considered social media addicts who spend long hours connecting on social media websites. Moreover, Youtube, Facebook and Instagram were respectively found to be the favourite social media websites for the students. Results also revealed that the respondents use social media for more than one purpose; communication, information and learning were found to be the purposes for which most of the students use these websites. The teachers' questionnaire provided useful insights on how supervisors and examiners evaluate Master research works and how they view academic achievement at this level of studies. The results clearly showed that the latter do not agree on the criteria that should be given more importance when assessing Master dissertations and that they view academic achievement at the Master level differently. Finally, Comparing the students' and the teachers' ratings, we found significant differences between how students perceive their information literacy skills and how their teachers view their competency level. Overall, the teachers' rating is at least 5 points lower than the students' rating. In fact, this suggests how subjective the process of evaluation can be. Even though both students and teachers were provided with the same description of the five information literacy competencies and were given the same scale to rate them, the two groups still differed significantly in how well they think students are information

literate. While students seem to overestimate their own skills, probably due to lack of experience in self-assessment, teachers seem to be so dissatisfied with their students' information literacy level in their final academic year.

In fact, earlier studies which have relied on self-assessment suggested that students tend to overrate their own performance. For instance, Fadel (2017, p. 316) found no significant correlation between the rating of senior students at the ENS (Ecole Normale Superieure) of their own teaching competencies and the scores they obtained in lesson planning and presentation competencies ($r = 0.228$ at $p < 0.05$); he found the participants' self- rates were noticeably higher than the scores they got when evaluating their lesson plans. Cohen (1995) as cited in Mistar, 2011, p. 46 listed five factors that may make self-assessment unreliable: a) the learners' lack of training of how to assess their own learning, b) a lack of common criteria for learners and teachers, c) differences between the culture of the learners and that on which self-assessment tasks are based, d) inabilities of the learners in monitoring and reporting their learning, and e) intervening effects of subjective influences, such as the desire to please the teacher. The implications for this study is that self-rating cannot be a reliable tool to measure students' information literacy competencies, and that a performance test is necessary in order to obtain more accurate measures of information literacy.

Conclusion

The findings of this study lead to many significant conclusions. First, there is a significant mismatch between the students' perceptions of their own information literacy skills and those of their teachers. To overcome this mismatch, self-evaluation should be a regular classroom activity in all the subjects taught followed by a classroom discussion about the criteria used for evaluation; this would train the students to have more objective and realistic views about their own performance, which would lead to improve their information literacy competencies. Third, even though most students are regular social media users, their supervisors are much dissatisfied with their information literacy competencies. This suggests that students may leave the university with poor information literacy skills, without even being aware, which might affect their ability to perform academic, professional or other tasks that involve some competence in information literacy. Because information literacy competencies are key to succeed in the process of research work, teachers, mainly supervisors, should provide help with students' weaknesses in accessing and using information for their research purposes; the challenges caused by the big number of students supervisors should deal with can be partly solved by the use of social media as a medium to get in touch with them whenever necessary and provide them with personified feedback that matches their individual needs. Finally, the concept of academic achievement at the second year of Master was found to have different understandings by different teachers, and the quality of Master dissertations was not perceived similarly by all educators. Hence, the students' dissertation scores cannot be an appropriate indicator to measure second year Master students' academic achievement. The latter should be measured by setting standard criteria of evaluation that should be applied to all dissertations.

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