

# **‘SOCIAL MEDIA ARE NOT NECESSARY FOR OUR WORK’. SOCIAL MEDIA USAGE PRACTICES BY PRIMARY SCHOOL TEACHERS. A GREEK CASE STUDY**

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## **ABSTRACT**

*Social media implementation in teaching still faces restrictions due to institutional, pedagogical and social factors that affect teachers and academics' attitude. This research explores teachers' social media usage practices that contribute to teaching preparation taking place "out of the classroom", since social media are not officially implemented in Greek education system. Teachers (n=121) of primary schools in Mytilene, Greece, were selected as case study. Research findings show that the majority of teachers, although using social media, do not generally utilize them for educational purposes and when this happens it refers mostly to search for educational content than post their own. Considering that younger teachers, teachers holding M.Sc. and Ph.D. and those familiar with ICT are shown to get more involved with the practices investigated, the research highlights the concept of habitus as a possible mediator that directs teachers to differentiate their actions between social media usage for personal and professional purposes.*

## **KEYWORDS**

*Social Media, Education, Teachers, Primary School, Greece*

## **1. INTRODUCTION**

Social media dominate worldwide. The term refers to a variety of platforms and applications that, as [1] highlight, are Internet-based -built on the ideological and technological foundations of Web 2.0- allowing the creation and the exchange of user generated content. Social media popularity has increased dramatically in the past years, as the number of users and platforms reveal, since social media ensure the provision of a convenient and effective way for communication among social actors without the constraints of place and time. In this frame, social media expansion to human activities within the public sphere of life (e.g. politics, business and education) was more than expected.

During the last decades, social media utilization in the field of education has led to new models of communication and interaction between different stakeholders (e.g. teaching staff, students, alumni, boards) supporting also new ways of learning (e.g. distance learning). However, social media usage as an educational and learning tool has been disputable for long. Researches have focused on exploring dimensions of social media usage within educational settings investigating both teachers and students' perceptions and experiences, benefits resulting from social media usage as well as obstacles regarding their implementation in the educational process [2, 3, 4, 5].

Nevertheless, it should be noted that most researches regarding social media usage focus on Higher Education Institutions (HEIs) rather than on primary and secondary educational settings, mainly referring to USA and Asia countries [6]. This may be attributed to the fact that HEIs advance innovation, while they also have wider autonomy regarding curricula and educational tools compared to other educational settings. Considering this, attention should be also paid to social media usage by primary and secondary education teaching staff. Besides, according to recent statistics, 77.5% of Generation X and 48.2% of Baby Boomers are active social media users [7] and these generations constitute the teaching population of the aforementioned settings.

In the frame above, this research aims to investigate social media usage practices by primary school teachers in Greek educational settings, mainly referring to practices for educational purposes that take place out of the classroom since social media are not officially incorporated into the teaching process. The paper is structured as follows. Section 2 refers to restrictions for social media adoption by teaching staff, while also referring to the Greek education system. The research questions and the research procedure are presented in Section 3. Section 4 records the research results, while Section 5 discusses the main findings and concludes the research.

## **2. RESTRICTIONS FOR SOCIAL MEDIA USAGE IN EDUCATIONAL SETTINGS**

The increasing popularity of social media in many sectors of private and public life including education, and their usage as educational and learning tool both in formal and informal education has received researchers' attention. In this frame, previous researches have investigated academics' views and attitude towards social media usage for personal, teaching or professional purposes [8, 9].

Literature has recorded several benefits resulting from social media usage in educational process; teaching innovation, students' easier and faster access to information, increased communication between students and instructors, knowledge / ideas sharing, enhancement of collaboration, increase of skills related to ICT usage and communication abilities as well as professional partnerships development [10, 11, 12, 13]. Simultaneously, obstacles and concerns regarding social media implementation in educational process have been also highlighted explaining thus the views and attitude of teaching staff towards social media adoption in teaching.

Faculty's familiarity with existing tools such as Learning Management Systems (LMS) may explain the way that social media are perceived and experienced [14, 15] in the frame of the teaching process. In fact, teaching staff show preference to LMS in several cases. Perceived usefulness and compatibility between social media and subject taught [16] as well as concerns regarding, for instance, time commitment, lack of training or time to learn new technologies, effectiveness of learning outcomes and privacy issues [12] have also been related to social media adoption by academics. Previous researches have revealed that age, gender, seniority, and scientific discipline also influence faculty's decisions regarding social media usage for educational purposes [17, 18, 9].

Moreover, researches in HEIs [19, 20, 8, 9, 21] have shown that the non-official adoption of social media by Institutions or the lack of institutional support constitute a problem for academics to use social media in the teaching process. This relates to the fact that the implementation of new learning models requires policy makers' approval and that academics must comply to the practices and regulations set by their Institutions.

The role of governments or decision-making bodies is crucial too. [22] underline that governmental agencies, educational policy-makers, school administration and boards are 'calling

for conservatism and avoidance of using social media' (p. 669). In some cases, in fact, such as that of Israel, the Ministry of Education issued a national ban on teacher-student communication through Social Network Sites[23]. This is obviously paradox considering that in a technologically driven society teachers should be supported to use social media for educational purposes addressing thus both to the technological challenges and the needs of students. The call for social media avoidance which obviously impacts on teachers' attitude may be related to the type and the philosophy of the education system. In other words, in centralized and teacher-centric education systems there is a tendency social media to be perceived as a rather unaligned innovation.

The aforementioned restrictions-mainly those referring to institutional reasons-are not applied when social media are used in the frame of teachers' informal professional development. As [24] underlines social media provide teaching staff 'the autonomy to self-select the activities which best improve their knowledge, practice, and sense of purpose' (p. 144). In this frame, teachers use platforms for several reasons, ranging from crowdsourcing ideas and finding resources that contribute to their courses to connecting with other educators at a distance [25] constructing thus networks which help them to shape or enhance their teaching practices, discover professional opportunities and increase their capacities to support students [26, 27].

Summarizing, it can be concluded that teachers' avoidance or reluctance to incorporate social media in the educational process relies on several factors that are related mainly to institutional reasons, pedagogical issues, and cultural and social factors [2].

## **2.1. Social Media usage in Greek Educational Settings**

Education systems are characterized by a significant diversity. Some systems are centralized, others partially decentralized and others completely decentralized. The Greek education system is a highly centralized one compared to others in the OECD context [28]. Ministry of Education decides on several issues regarding primary and secondary education; subjects to be taught, curricula and their objectives, expected learning outcomes, supportive material, interactive tools and platforms to be used for teaching enhancement. On the other hand, Greek HEIs are self-governed and have autonomy regarding these issues.

According to the findings of a previous research [29] addressed to the Heads of the 13 Regional Directorates of Education, the Heads of the 58 Directorates of Secondary Education and the Rectors of the 22 Greek Universities, social media are used mainly for promotion and publicity purposes including the presentation of students' and teaching staff's work, while in lower rates for communication between teaching staff and students. These findings reveal that social media are not yet incorporated in the educational process in Greece and are consistent with [30]'s argument that social media 'usage in classrooms can be perceived as an innovation' (p. 90). In fact, the Greek Ministry of Education does not promote social media usage, while supporting the educational process by an official platform called 'photodentro', the Greek national repository of educational content that is continuously enriched for both primary and secondary education needs. In this frame, teachers in primary and secondary education are expected not to use social media in the teaching process complying thus with the norms and rules set by the Ministry.

## **3. METHODOLOGY**

### **3.1. Statement of Interest**

Literature has acknowledged several obstacles for social media non adoption in the educational process, highlighting though that these tools impact positively on teachers' professional development and contribute also to shaping practices that enhance educational process.

Considering that social media have not been officially implemented in the Greek education system, this research aims to explore how Greek primary school teachers use social media in the frame of their professional activities out of the classroom in order to promote the teaching process preparation and the interaction with peers and others (e.g. parents).

**Thus, the research questions posed are as follows:**

RQ1: How frequently do primary school teachers use social media to search educational material and use it, to share content or communicate with others?

RQ2: What are teachers' views regarding social media impact on teaching enhancement and their professional development?

RQ3: How do gender, age, employment status and other demographic variables relate to teachers' social media practices and their views?

### **3.2. Participants**

All teachers of the primary schools in Mytilene, a Greek town in the North Aegean Region, were selected as a case study. According to data available to researchers, 174 teachers in total were serving during the school year 2019-2020 in the 16 public primary schools.

### **3.3. Research Tool and Procedure**

For the purposes of the research, a two-section questionnaire, as described below, was structured following the rules set by [31].

The first section of the questionnaire (10 items in total) titled 'General Information' focuses on the socio-demographic characteristics of the sample (age, gender, employment status, years of service, position of responsibility, education level,) exploring also teachers' familiarity with ICT and ICT usage for educational purposes (attendance of training programs/ seminars on ICT, holding an ICT certificate, familiarity extent with ICT and ICT usage extent for educational purposes).

The second section 'Social media usage practices includes two sub-sections, as described below, with closed-ended questions (most of them in Likert-scale) and one open-ended (16 items in total). The first subsection (2.1) refers to teachers' social media usage practices and the second (2.2) to their views regarding social media impact on teaching and their professional development. The items of the subsection 2.1 were developed after interviewing five (5) teachers about their social media practices that are related to teaching preparation and communication.

Subsection 2.1

- In which of the following social media (Facebook, Twitter, Instagram, Pinterest, Flickr, Google+, LinkedIn, YouTube, Issuu, or other) do you retain profile?
- How frequently (0=never to 7= every day) do you use the following social media (Facebook, Twitter, Instagram, Pinterest, Flickr, Google+, LinkedIn, YouTube, Issuu, or other) to:
  - a) search for educational material/ideas in order to organize your courses or other educational activities
  - b) use the educational material found in order to organize your courses or other educational activities
  - c) share educational activities (e.g. conferences, educational programs)

- d) post your own content
  - e) share educational webpages
  - f) communicate/chat with your colleagues for educational issues
  - g) recommend your colleagues to visit social media for educational purposes and
  - h) communicate with students' parents
- If you have answered "Never" to all questions above, please indicate the reasons why you have never used social media for educational purposes? (Open question)

#### Subsection 2.2

- To what extent (1=Not at all to 5=Very much) do you think that social media:
  - a) contribute to the promotion of educational activities?
  - b) contribute to the creation or strengthening of educational material?
  - c) contribute to teaching support?
  - d) enhance the communication with your colleagues?
  - e) enhance the communication with students' parents?
- To what extent (1=Not at all to 5=Very much) do you believe that the use of social media for educational purposes (e.g search of content, collaboration with others) can positively affect your professional development?

The participants were clearly informed about the research purpose in the questionnaire's introductory note [32] being asserted about the anonymity of their responses which is crucial for the protection of confidentiality. Neither the names of the respondents nor the school name were required in the questionnaire form.

The questionnaire was checked for its language, clarity, difficulty and reliability in a pilot survey addressed to 5 participants. This stage is important since it ensures that the questions are understood and suitable for the information for which they were designed, while also detecting the interest and cooperation of the respondents [33].

After its pilot implementation, the questionnaire was corrected and received its final form. Copies were posted to schools' Principals in order to hand them to teachers who participated voluntarily. The research was conducted from 15th December 2019 until 15th January 2020.

Researchers coded the completed questionnaires using code numbers. The data collected were analysed using the SPSS v.26. A level of 0.05 was established for determining the statistical significance.

## 4. RESULTS

One hundred twenty-one (121) teachers completed the questionnaire (69.54%). This response rate is representative for the whole primary teacher population in Mytilene (n=174).

### Section 1: General Information

According to the demographic data, 71.1% of the participants are women and 28.9% men, having a mean age of 46.33 years old (min=24, max: 63). The majority (79.3%) is permanent teaching staff, while 20.7% is substitute. Most of the participants (75.2%) hold only bachelor degree, 23.1%

Master degree, and 0.8% PhD degree (1 teacher did not answer). Of the participants, 33.9% have more than 30 years of service, followed by 26.4% who have served 21-30 years and 17.4% 13-20 years. Five or less years of service was declared by 12.4% of the teachers and 6-12 years by 9.9%.

More than half of the teachers (58.7%) have attended training programs/ seminars on ICT, while 66.9% of the total sample hold an ICT certificate, the majority of them (n=69) being permanent staff.

Participants were asked to state the extent to which they a) feel familiar with ICT usage and b) use ICT in the educational process. ICT familiarity and usage are important considering that since 2008 UNESCO has underlined the need to strengthen ICT usage in education, emphasizing on teachers' ICT competencies [34]. Findings for both questions are shown in Table 1 below.

Table 1. Teachers' familiarity with ICT usage and ICT usage in the educational process

	ICT usage familiarity (%)	ICT usage in educational process (%)
Very much	11.6	11.6
Much	28.9	20.7
Fairly	39.7	37.2
Little	15.7	21.5
Not at all	3.3	6.6
Missing	.8	2.5
Total	100.0	100.0

## Section 2: Social media usage practices

### Subsection 2.1

Results analysis show that 63.6% of the respondents have profile on FB, 6.6% on Twitter, 24.8% on Instagram, 35.5% on Pinterest, one on Flickr and another one on Issuu, 39.7% on Google+, 9.9% on LinkedIn, 32.2% on YouTube and 5.8% on other platforms. We note that the case "other" refers to messenger, viber or email, as clarified by the participants.

A set of questions regarding social media usage was addressed to teachers in order to explore their practices according to RQ1. All practices investigated, beyond contributing to the teaching process preparation, constitute learning opportunities [24] in the frame of teachers' professional development and take place out of classroom. The results of these questions are presented in Table 2. It is quite interesting that the majority of the respondents do not generally prefer using social media for educational purposes, as the high rates for the reply 'never' reveal, despite the fact that they have social media profiles.

Table 2. Frequency of teachers' social media usage practices

		Facebook	Twitter	Instagram	Pinterest	Flickr	Google+	LinkedIn	YouTube	Issuu	Other
		%	%	%	%	%	%	%	%	%	%
never	a	59.5	95.9	92.6	62.8	95.9	37.2	93.4	46.3	99.2	95.0
	b	64.5	97.5	95.0	63.6	93.4	42.1	93.4	50.4	97.5	98.3
	c	64.5	99.2	95.0	94.2	99.2	86.0	97.5	90.9	100.0	92.8

	d	76.9	99.2	99.0	95.0	99.2	90.1	97.5	94.2	99.2	99.2
	e	54.5	95.9	95.0	85.1	99.2	81.0	97.5	89.3	99.2	100.0
	f	50.4	96.7	91.7	90.9	98.3	86.0	99.2	92.6	99.2	96.7
	g	56.2	95.9	91.7	69.4	97.5	52.1	95.0	64.5	99.2	98.3
	h	68.6	98.3	98.3	98.3	99.2	93.4	98.3	95.9	99.2	97.5
few times a year	a	10.7	.8	1.7	5.0	.8	7.4	.8	8.3	.8	1.7
	b	12.4			7.4	.8	7.4		10.7		
	c	17.4		2.5	2.5	.8	10.7	2.5	7.4		.8
	d	11.6	.8	3.3	4.1		9.1	2.5	5.0		
	e	20.7	.8	2.5	5.0		10.7	2.5	5.8	.8	
	f	15.7		4.1	.8	1.7	6.6		3.3		.8
	g	18.2	.8	4.1	12.4	.8	24.8	1.7	14.9		
	h	14.0	.8		.8	.8	2.5	.8		.8	1.7
1-3 times a month	a	6.6			4.1	.8	1.7	1.7	10.7		.8
	b	6.6		.8	6.6	.8	4.1	.8	5.8		
	c	6.6		.8	.8						
	d	7.4		.8					.8		.8
	e	12.4	.8	.8	5.8	.8	1.7		1.7		
	f	11.6		.8	4.1		2.5	.8	2.5	.8	.8
	g	10.7			7.4		9.1	2.5	10.7	.8	.8
	h	8.3			.8		1.7		.8		
once a week	a	7.4		.8	2.5		8.3	1.7	7.4		
	b	4.1		.8	3.3	.8	7.4	1.7	9.1	.8	
	c	5.8					.8				
	d	.8			.8	.8					
	e	3.3					.8		.8		
	f	3.3							.8		.8
	g	1.7	.8	.8	.8		3.3		1.7		
	h	1.7					.8		.8		
twice a week	a	1.7	.8	.8	10.7	.8	9.1		4.1		.8
	b	5.0		.8	5.8		10.7	1.7	6.6	.8	.8
	c	1.7		.8							
	d	1.7								.8	
	e	2.5			.8		.8				
	f	5.0		1.7							
	g	4.1		.8	1.7	.8	2.5	.8	2.5		
	h	1.7							1.7		
3-6 times a week	a	4.1		.8	4.1		20.7	.8	11.6		.8
	b	2.5	.8		7.4	.8	16.5	2.5	11.6		.8
	c	1.7			.8		.8				
	d	.8		.8			.8				
	e	3.3	.8		1.7		3.3		2.5		
	f	6.6			1.7		2.5				
	g	5.0	.8	.8	5.8	.8	4.1		2.5		
	h	1.7	.8	1.7							
Every day	a	9.9	2.5	3.3	9.9	1.7	15.7	1.7	11.6		.8
	b	5.0	1.7	2.5	5.8	2.5	11.6		5.8	.8	
	c	2.5	.8	.8	1.7		1.7		1.7		
	d	.8									
	e	3.3	.8	1.7	1.7		1.7				
	f	7.4	3.3	1.7	2.5		2.5		.8		.8
	g	4.1	1.7	1.7	2.5		4.1		3.3		.8
	h	4.1					1.7	.8	.8		.8

a. search for educational material/ideas in order to organize courses or other educational activities, b. use the educational material found for the above purposes, c. share educational activities (e.g. conferences, educational programs), d. post their own content, e. share educational webpages, f. communicate/chat with their colleagues for educational issues, g. recommend their colleagues to visit social media for educational purposes, h. communicate with students' parents

Teachers having responded 'never' to all previous questions were asked to state the reasons for not using social media. Two of the participants (code numbers: 109, 113) consider social media not necessary for their work, while six focus either on their unfamiliarity with computers in general (code number: 14), social media specifically (code number: 17) and lack of experience (code numbers: 78, 80) that lead to high perception of risk when using social media (code number: 92) or on the choice to search for educational material in other sources (code number: 104). The issue of online risk is also stated by participant 114. Three teachers consider social media as inappropriate means for educational purposes (code number: 13) distorting scientific knowledge (code number: 90) and as unreliable (code number: 48). Not having a profile on social media (code numbers: 16, 89) due to restricted leisure time (code number: 95) or having turned off the profile (code number: 68) are also recorded as reasons for not using social media. One of the teachers (code number: 84) stated that he/she doesn't like sharing aspects of his/her personal life, while two emphasize on face to face communication; participant 2 stated that students' parents should not be informed about their children via social media but in vivo in school, while participant 69 declared not using social media for educational issues in order to avoid misunderstandings. Participant 59 stated his/her age as a reason for not using social media also referring to ideological reasons, as he/she believes that education presupposes face to face contact with the students and technology can only serve as a tool and not as way for learning. Ideological reasons also came up in the response of participant 75.

## Subsection 2.2

The last six questions of the questionnaire explore teachers' views on social media impact on educational activities promotion, educational material creation, teaching support, enhancing communication among teachers and students' parents and social media impact on teachers' professional development (RQ2). Results presented in Table 3 reveal that more teachers acknowledge the positive impact ('much' and 'very much') of social media usage on educational material creation (44.7%) and communication enhancement with colleagues (42.1%).

Table 3. Teachers' views regarding social media impact

	Social media impact on (%)					professional development
	educational activities promotion	educational material creation	teaching support	enhancement of communication with		
				colleagues	Students' parents	
Very much	11.6	14.9	13.2	13.2	5.0	15.7
Much	26.4	29.8	24.0	28.9	19.8	19.8
Fairly	47.9	43.8	41.3	30.6	30.6	38.0
Little	11.6	9.9	17.4	19.8	22.3	20.7
Not at all	1.7	.8	2.5	5.8	19.8	4.1
Missing	.8	.8	1.7	1.7	2.5	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0



## Relationships between variables

This sub-section presents the statistically significant results regarding relationships between variables. Demographic and other variables examined (RQ3) are found to be related to having a profile on social media as Tables 4, 5 and 6 present. Specifically, women have more profiles on Pinterest, while substitute teaching staff's profiles were overrepresented on Facebook, Instagram, Pinterest and LinkedIn. Teachers with higher educational level (M.Sc. or Ph.D.) have more Facebook profiles compared to those holding a bachelor degree, while the latter have fewer profiles on Instagram compared to their colleagues with M.Sc. or Ph. D degrees. Age is shown to be positively related to having a profile on Facebook, Instagram, Pinterest, LinkedIn, and YouTube, while years of service to the first four social media. In relation to ICT familiarity and usage, results show that both are negatively related to having a profile on Facebook, Instagram, Pinterest and YouTube, while ICT usage for educational purposes is also negatively related to Twitter, LinkedIn, and other.

Table 4. Relationship between gender, employment status, educational level and profile on social media

	Gender	Employment status	Educational level
Profile on			
Facebook		$\chi^2= 10.640 (1), p =.001$	$\chi^2=10.451 (1), p=.001$
Instagram		$\chi^2= 31.141 (1), p =.000$	$\chi^2=7.827 (1), p=.005$
Pinterest	$\chi^2= 7.507 (1), p =.006$	$\chi^2= 10.896 (1), p =.001$	
LinkedIn		$\chi^2= 6.760 (1), p =.009$	

Table 5. Relationship between age, years of service and profile on social media

	Age	Years of service
Profile on		
Facebook	$\rho=.331, p=.001$	$\rho=.314, p=.000$
Instagram	$\rho=.410, p=.000$	$\rho=.417, p=.000$
Pinterest	$\rho=.454, p=.000$	$\rho=.299, p=.001$
LinkedIn	$\rho=.266, p=.011$	$\rho=.203, p=.027$
YouTube	$\rho=.297, p=.005$	

Table 6. Relationship between ICT familiarity, ICT usage in the educational process and profile on social media

	ICT familiarity	ICT usage in the educational process
Profile on		
Facebook	$\rho=-.316, p=.000$	$\rho=-.314, p=.001$
Twitter		$\rho=-.200, p=.030$
Instagram	$\rho=-.250, p=.006$	$\rho=-.262, p=.004$
Pinterest	$\rho=-.280, p=.002$	$\rho=-.377, p=.000$
LinkedIn		$\rho=-.195, p=.035$
YouTube	$\rho=-.256, p=.005$	$\rho=-.237, p=.010$
Other		$\rho=-.198, p=.031$

Attending ICT training programs is shown to be related negatively at a low degree to ICT familiarity ( $\rho=-.230, p=.013$ ) and ICT usage in educational process ( $\rho=-.374, p=.000$ ), which implies that familiarity and usage may depend more on other factors (e.g. experience from ICT). Age is also negatively related to ICT familiarity ( $\rho=-.219, p=.038$ ), while educational level is positively associated with ICT usage for educational purposes ( $\rho=.208, p=.024$ ).

With reference to teachers' social media usage practices out of classroom, differentiations came up for gender with reference to searching for educational material/ideas on Pinterest [ $\chi^2= 7.586$  (2),  $p = .023$ ] and using educational material from this platform [ $\chi^2= 7.418$  (2),  $p = .024$ ], revealing that more women search for educational material on Pinterest daily or once a week, and use more frequently the material found.

Age and years of service relate negatively to a wide range of teachers' social media usage practices, as recorded in Table 7. Only in the case of sharing educational activities on YouTube ( $\rho=.188$ ,  $p=.039$ ) and recommending colleagues to visit Google+ ( $\rho=.201$ ,  $p=.027$ ) positive relationships with the years of service have been found. In other words, younger teachers having fewer years of service are more prone to get involved in the social media usage practices investigated.

Table 7. Relationship between age, years of service and teachers' social media usage practices

Social media usage practices		Age	Years of service
Search for educational material /ideas	Facebook	$\rho=-.298$ , $p=.004$	$\rho=-.264$ , $p=.003$
	Instagram		$\rho=-.199$ , $p=.029$
	Pinterest	$\rho=-.513$ , $p=.000$	$\rho=-.397$ , $p=.000$
Use educational material	Facebook	$\rho=-.262$ , $p=.012$	$\rho=-.250$ , $p=.006$
	Instagram	$\rho=-.232$ , $p=.028$	$\rho=-.261$ , $p=.004$
	Pinterest	$\rho=-.507$ , $p=.000$	$\rho=-.395$ , $p=.000$
Share educational activities	Facebook	$\rho=-.209$ , $p=.048$	$\rho=-.242$ , $p=.008$
	YouTube		$\rho=.188$ , $p=.039$
Post content of their own	Facebook	$\rho=-.245$ , $p=.020$	$\rho=-.304$ , $p=.001$
	Instagram	$\rho=-.369$ , $p=.000$	$\rho=-.343$ , $p=.000$
Share educational webpages	Facebook	$\rho=-.286$ , $p=.006$	$\rho=-.291$ , $p=.001$
	Instagram	$\rho=-.312$ , $p=.003$	$\rho=-.294$ , $p=.001$
Communicate with colleagues	Facebook	$\rho=-.262$ , $p=.012$	$\rho=-.359$ , $p=.000$
	Instagram	$\rho=-.380$ , $p=.000$	$\rho=-.354$ , $p=.000$
Recommend colleagues to visit a platform	Facebook	$\rho=-.231$ , $p=.029$	$\rho=-.262$ , $p=.004$
	Instagram	$\rho=-.291$ , $p=.005$	$\rho=-.313$ , $p=.000$
	Pinterest	$\rho=-.337$ , $p=.001$	$\rho=-.227$ , $p=.012$
	Google+		$\rho=.201$ , $p=.027$
Communicate with students' parents	Facebook	$\rho=-.211$ , $p=.046$	$\rho=-.270$ , $p=.003$

Results regarding the relationship between teachers' social media usage practices and employment status on one hand and educational level on the other are presented in Table 8 below. As revealed substitute staff and participants who hold a Master or a Ph.D. use social media for the practices investigated more frequently (mostly 'every day' or 'twice a week').

Table 8. Relationship between employment status, educational level and teachers' social media usage practices

Social media usage practices		Employment status	Educational level
Search for educational material/ideas	Facebook	$\chi^2= 6.335$ (2), $p = .042$	$\chi^2= 6.985$ (2), $p= .030$
	Twitter	$\chi^2= 7.451$ (1), $p = .006$	$\chi^2= 5.834$ (1), $p= .016$
	Instagram	$\chi^2= 15.313$ (2), $p = .000$	$\chi^2= 9.580$ (2), $p= .008$
	Pinterest	$\chi^2= 25.650$ (2), $p = .000$	
Use educational material	Facebook		$\chi^2= 10.605$ (2), $p= .005$
	Twitter	$\chi^2= 3.972$ (1), $p = .046$	
	Instagram	$\chi^2= 8.660$ (2), $p = .013$	$\chi^2= 12.519$ (2), $p= .002$

	Pinterest	$\chi^2= 23,635 (2), p= .000$	
Share educational activities	Facebook		$\chi^2= 13.603 (2), p= .001$
	Twitter	$\chi^2= 3.872 (1), p= .049$	
	Instagram		$\chi^2= 9.655 (2), p= .008$
Post content of their own	Facebook	$\chi^2= 7.461 (2) p= .024$	$\chi^2= 14.543 (2), p= .001$
	Instagram	$\chi^2= 7.809 (2), p= .020$	
	Pinterest	$\chi^2= 3.872 (1), p= .049$	
	Google+	$\chi^2= 3.872 (1) p= 0.49$	
	YouTube	$\chi^2= 3.872 (1) p= 0.49$	
Share educational webpages	Facebook		$\chi^2= 11.064 (2), p= .004$
	Twitter	$\chi^2= 12.027 (2), p= .002$	$\chi^2= 9.927 (2), p= .007$
	Instagram	$\chi^2= 11.813 (2), p= .003$	$\chi^2= 6.670 (2), p= .036$
Communicate with colleagues	Facebook	$\chi^2= 9.697 (2), p= .008$	$\chi^2= 15.192 (2), p= .001$
	Twitter	$\chi^2= 7.451 (1), p= .006$	$\chi^2= 5.834 (1), p= .016$
	Instagram	$\chi^2= 20.028 (2), p= .000$	
	LinkedIn	$\chi^2= 3.872 (1), p= .049$	
Recommend colleagues to visit a platform	Facebook	$\chi^2= 9.769 (2), p= .008$	$\chi^2= 16.973 (2), p= .000$
	Twitter	$\chi^2= 12.027 (2), p= .002$	$\chi^2= 9.927 (2), p= .007$
	Instagram	$\chi^2= 16.083 (2), p= .002$	
	Pinterest	$\chi^2= 7.039 (2), p= .030$	
	Google+		$\chi^2= 8.244 (2), p= .016$
Communicate with students' parents	Facebook		$\chi^2= 9.393 (2), p= .009$
	Twitter	$\chi^2= 3.872 (1), p= .049$	
	Instagram		$\chi^2= 6.382 (1), p= .012$

The positive relationships between teachers' social media usage practices and ICT familiarity on one hand and ICT usage on the other are presented in Table 9 below.

Table 9. Relationship between ICT familiarity, ICT usage in the teaching process and teachers' social media usage practices

Social media usage practices		ICT familiarity	ICT usage
Search for educational material/ideas	Facebook		$\rho=.305, p=.001$
	Pinterest	$\rho=.383, p=.000$	$\rho=.389, p=.000$
	Google +	$\rho=.196, p=.032$	$\rho=.339, p=.000$
	YouTube	$\rho=.497, p=.000$	$\rho=.499, p=.000$
Use educational material	Facebook		$\rho=.285, p=.002$
	Instagram		$\rho=.194, p=.036$
	Pinterest	$\rho=.392, p=.000$	$\rho=.411, p=.000$
	Google+		$\rho=.271, p=.003$
	YouTube	$\rho=.409, p=.000$	$\rho=.369, p=.000$
Share educational activities	Facebook	$\rho=.260, p=.004$	$\rho=.375, p=.000$
	Pinterest		$\rho=.216, p=.019$
	Google+		$\rho=.260, p=.004$
	YouTube	$\rho=.327, p=.000$	$\rho=.329, p=.000$
Post content of their own	Facebook		$\rho=.282, p=.002$
	Google +		$\rho=.185, p=.044$
	YouTube	$\rho=.225, p=.014$	$\rho=.299, p=.001$
Share educational webpages	Facebook	$\rho=.297, p=.001$	$\rho=.420, p=.000$
	Pinterest		$\rho=.243, p=.008$
	Google+		$\rho=.257, p=.005$
	YouTube	$\rho=.248, p=.006$	$\rho=.287, p=.002$
Communicate with colleagues	Facebook	$\rho=.212, p=.020$	$\rho=.346, p=.000$
	Pinterest	$\rho=.232, p=.011$	$\rho=.279, p=.002$

Recommend colleagues to visit a platform	Facebook		rho=.287, p=.002
	Pinterest	rho=.333, p=.000	rho=.368, p=.000
	Google+		rho=.249, p=.007
	YouTube	rho=.274, p=.002	rho=.333, p=.000
Communicate with students' parents	Facebook	rho=.228, p=.012	rho=.302, p=.001
	Twitter	rho=.209, p=.022	
	Instagram	rho=.209, p=.022	rho=.209, p=.023
	Google+		rho=.193, p=.036
	YouTube		rho=.194, p=.035

Referring to teachers' views regarding social media impact on their work and their professional development no significant relationships have been found with either age, gender or years of service. On the contrary, educational level is shown to be related positively to teachers' views regarding social media contribution to communication enhancement with colleagues [ $\chi^2=10.824$  (2),  $p=.004$ ] and parents [ $\chi^2=6.261$  (2)  $p=.044$ ]. Specifically, teachers with Master or Ph.D. degree were found to communicate with their colleagues and students' parents more frequently compared to those holding bachelor degree. Positive relationships between teachers' views and ICT familiarity on one hand and ICT usage in the teaching process on the other are recorded in Table 10 below.

Table 10. Relationship between ICT familiarity, ICT usage and teachers' views

	ICT familiarity	ICT usage
<b>Teachers' beliefs about social media impact on</b>		
educational activities promotion	rho=.436, p=.000	rho=.549, p=.000
educational material creation	rho=.372, p=.000	rho=.530, p=.000
teaching support	rho=.295, p=.001	rho=.480, p=.000
enhancement of communication with colleagues	rho=.454, p=.000	rho=.446, p=.000
enhancement of communication with students' parents	rho=.404, p=.000	rho=.371, p=.000
professional development	rho=.307, p=.000	rho=.452, p=.000

## 5. DISCUSSION

The results of this research exploring primary school teachers' social media practices out of classroom showed that the majority of teachers have profile on Facebook, the most popular Social Networking Site worldwide [35], followed by those who retain profile on Google+, Pinterest, YouTube and Instagram. However, when teachers were asked about social media usage practices being related to their professional (connected to teaching) activities, the reply 'never' was stated at very high rates in the overwhelming majority of the cases investigated. This finding reveals that teachers although retaining profile on social media, do not use them in general for educational purposes, which verifies what previous researches [36, 9] have shown for academics; they use social media more for personal reasons and less in the frame of teaching activities. Even in cases where social media usage for educational purposes was recorded (with reference to the five most used platforms as declared by the respondents), teachers were shown more to search for educational material in order to use it rather than posting their own content. This finding which indicates that teachers are more willing to use a platform for crowdsourcing ideas and finding out educational material is consistent with [25, 37, 8] findings having shown that teaching staff prefer to view existing content rather than posting their own. It can be assumed thus that teachers included in our sample are 'info-consumers' [24]. High percentages of 'never' replies regarding teachers' communication with their colleagues via social media were also recorded with the exception of Facebook. This finding is interesting considering that previous research findings

[25, 27] showed that teachers use social media to connect with other educators building networks of support.

Teachers stated several reasons for not using social media besides not having a profile; a) unfamiliarity with ICT or social media and lack of experience which verifies previous researches highlighting perceived ease of use and experience having an effect on teachers' behavioural intention to use social media [30]; b) perceived usefulness and effectiveness for achieving learning outcomes (teachers' views about social media not being necessary or being unreliable and inappropriate means for educational purposes) which has already been identified to relate to social media adoption [16, 30, 12] and c) concerns regarding risks resulting from social media usage (misunderstandings and privacy issues).

Both age and years of service showed to be negatively related to teachers' social media usage practices, despite the fact that both variables contribute positively to having a social media profile. In other words, teachers, regardless their age, retain profiles on social media probably for personal communication mainly, as high level of usage for educational purposes was not supported in general. It should be noted that among teachers, substitute teaching staff tend to use specific social media (Facebook, Instagram, Pinterest and LinkedIn) for educational purposes more than permanent staff in terms of frequency which is rather expected since according to recent statistics [38-40], most Facebook, Instagram and LinkedIn users worldwide belong to the age group of 25-30 years old which partly coincides with the age group of substitute teachers, as demographic data showed. Considering that age is obviously related to the years of service and employment status, the findings above support those of other researches having shown that age and seniority influence decisions regarding social media usage for educational purposes [17, 18, 9]. Teachers' educational level was found to be related to their social media usage practices. Specifically, teachers holding a M.Sc. or Ph.D. were shown to use social media for educational purposes more frequently, while educational level (M.Sc. or Ph.D.) was also positively related to teachers' views regarding social media impact on communication enhancement with colleagues and parents.

ICT familiarity and ICT usage were positively associated with teachers' practices. Both variables relate to the perceived ease of use and the experience that have been recorded to have a significant (the latter) and a weaker impact (the first) on teachers' behavioural intention to use social media [30]. Furthermore, ICT familiarity and ICT usage were positively related to teachers' views regarding social media impact on their educational activities and their professional development.

Finally, the descriptive statistics regarding teachers views on social media impact on the topics investigated showed that moderate impact ("fairly" reply) was stated by at least 1/3 of the teachers. The high impact percentages ("much" and "very much" replies) exceeded in all cases the low and no impact percentages ("not at all" and "little" replies) with the exception of the case that refers to communication with parents. These findings are obviously controversial with the findings regarding frequency of social media usage by teachers for the practices investigated. If teachers acknowledge the impact of social media on educational activities promotion, material creation, teaching support, professional development and communication with peers, why don't they seize the opportunities that social media provide them?

Social media practices contribute to teachers' educational practices enhancement and impact on their informal professional development through self-directed learning and participation in collaborative networks. Literature has recorded institutional and pedagogical barriers regarding social media incorporation into the teaching process. However, in this case the investigated

teachers' social media practices are related to the "out of classroom activities". Moreover, a high percentage of the respondents had social media profiles. So, how can teachers' reluctance to use social media for educational purposes out of the classroom be explained? Why do teachers seem to differentiate between social media usage in the frame of social (personal) and professional life? These questions can perhaps be answered if we consider the concept of habitus. Habitus [41] refers to a shaped system of dispositions, tendencies, perceptions and consequently social actions and constitutes an obstacle in action changes. Habitus drives teachers' actions to use social media for interpersonal communication but not for teaching preparation activities, despite the fact that in general they acknowledge social media positive impact on teaching enhancement and their professional development. If habitus is the key factor in this case, this explains why younger teachers -mainly substitutes-, with fewer years of service and having M.Sc. or Ph.D. are more prone to adopt new ways of *modus operandi* regarding their teaching activities "out of the classroom", while older or those less ICT familiar remain more consistent to social media usage for personal reasons mainly.

## 6. CONCLUSION

Social media are not officially implemented in the teaching process in Greece. Considering this, this research focused on investigating teachers' social media usage practices for educational and professional purposes out of the classroom, acknowledging that in classroom teachers have to comply with the regulations set by the Ministry regarding the learning tools to be used. The teachers serving in primary schools in Mytilene were selected as a case study.

Although the majority of teachers participating in this research acknowledged the positive impact of social media on educational activities promotion, material creation, teaching support, professional development and communication with peers, their social media practices did not coincide with their views, as the high number of "never" replies showed for the overwhelming majority of the cases investigated. Considering that institutional barriers do not exist since the practices under scope take place out of classroom and that pedagogical issues (perceived usefulness and effectiveness for achieving learning outcomes) came up as a reason for not using social media in few cases, teachers' unwillingness to use social media may be attributed to the habitus that forms people's social actions. Thus, unsurprisingly, younger teachers having M.Sc. or Ph.D. were more willing to employ to activities beyond the "traditional" social media usage for interpersonal communication –in this case for teaching preparation and professional development- while older participants remain more consistent to "traditional" usage, despite the fact that both acknowledge benefits from social media usage, as their views revealed.

Although interesting findings came up, this research is a case study and, consequently, the results cannot be generalized for all Greek primary school teachers. Moreover, we acknowledge that the questionnaire is self-reported and this may have implications on the results. In a future extension of this work, specific factors that impact on teachers' social media usage practices (e.g. the relationship between having a profile on a specific platform and teachers' practices in that platform) as well as teachers' views in accordance to their practices will be explored in depth. Future research should explore other factors that may impact on teachers' behavioural intention to use social media such as familiarity with or preference to tools approved by the Ministry of Education (e.g. Photodentro), while investigation on the views and attitude of secondary education teaching staff is necessary also in order to detect possible differentiations among teaching staff in different educational levels.

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