The Changes in Social Media Usage: Students' Perspective

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ABSTRACT The power of social networking sites increases in direct proportion with their functionalities so that the popularity and sweep of these sites greatly affect the users' prejudice and thoughts towards them. It is clear that social networking and social media have a large influence on the way people think and behave. In particular, Facebook has a broad participation all over the Internet. Through the years, the interface and functionality of Facebook have changed and transformed from a university-only communication tool to one of the most well known websites online. Educational institutions are increasingly using Facebook to connect with registered students and to grasp the potential one. This paper aims to demonstrate how the use of Facebook has changed over a time. That is to say, the purpose is to examine how the university students' opinions and usage of Facebook in education changed from the year 2009 to 2013. This research involves 382 students from two different universities in North Cyprus. The "Facebook Usage Questionnaire" was used to collect data. The result of this research indicated that perceptions and usage of Facebook have changed and expanded over the years and also Facebook has become an important tool for education.

INTRODUCTION

In the first decade of the 21st century, innovative web-based technologies are being integrated into learning contexts. The quick increasing and spreading of the Internet and related technologies have led to proliferation of social media sites, furthermore this gets them to be recognized and accepted by a number of users. The number of social network users around the world is 1.96 billion in the year 2015 and it is estimated that the social network audience will total 2.44 billion by 2018 (Statista 2015). Consequently, due to the increased number of social networking site users, social network sites have turned into an inevitable part of everyone's life. Although the social media has been defined in many ways, Bryer and Zavattaro (2011) define social media as the technologies that facilitate social interactions, make possible collaborations and enable deliberation across stakeholders. These technologies include blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms, and virtual worlds. Facebook, the most popular social networking website in the world, was created in a Harvard University dorm in the winter of 2004 by Mark Zuckerburg. Facebook has become an important component of many students' lives as a way of meeting friends, communicating information and activities (Ryan and Xenos 2011). Facebook has affected the social life and activity of students in various ways. Facebook used by students is mostly oriented towards connecting and communicating to others and for posting personal information, such as pictures, hobbies and relationship status (Cheung et al. 2011). Besides, Facebook acts like a daily local newspaper allowing users to follow other people's posts and content (Lee and Long 2012). Nowadays, people instead of reading a newspaper or watching the news, they check their social networks every morning when they wake up.

The quick viral evolution proposes that Facebook fills a deep-rooted human craving for communication, learning and keep track of the activities of others in the network, furthermore, "Social scientists have attempted to identify and recognize the use of Facebook by the younger generation to understand how this generation interacts online, communicates and identifies itself as a member of an online community" (Dong 2008). For example, Facebook can be seen as a platform, which people connected through on various matters, including interests, politics, university, city, sports, relatives and

jobs, and also learning. Lee at al. (2014) stated that usage of Facebook is associated with social capital gains and usage of Facebook linked to the psychological wellbeing that can provide positive outcomes for low esteem and low life satisfaction (Gonzales 2014).

During the very first years of social networking sites, most studies carried out were related with the opinions of users on the integration, and then they focused on the usage of social networking sites to support the education or even using them to assist courses or as a course management system (Hew 2011; Chen and Breyer 2012: Moller and Stone 2013). In one of the earliest studies, Kirschner and Karpinski (2010) described and explored the Facebook usage and its relation to academic achievement among university students. Similarly, Schlenkrich and Sewry (2012) have discussed the students' perceptions and roles in Facebook as a learning environment in varying degrees. Students make use of Facebook to perform a wide range of social tasks such as keeping in touch with high school friends or organizing activities like social events, as well as dissemination of information and notifying everyone of their daily life by posting status updates, checking, and sharing photos (Park and Lee 2014). In a recent research study, Sánchez et al. (2014) stated that social influence is the most crucial factor in the likelihood acceptance of Facebook. Furthermore, social relation is seen as the most common purpose of using Facebook.

A large number of research studies have investigated the pedagogical outcomes of higher education students' engagement with Facebook (Dabbagh and Kitsantos 2012; Hutchens and Hayes 2014; Ainin et al. 2015). Many outcomes have revealed the educational usage of Facebook such as students who communicate with teachers over Facebook resulted by the higher level of motivation, affective learning, and a more positive classroom climate. However, most of the former studies pointed out that undergraduate students mainly used Facebook to have pre-registration engagement and also to make new friends during the pre-registration period, but not for formal teaching purposes (Vincent and Weber 2011). Although Selwy (2014) indicated that education-related usage of Facebook is limited only as an acting space that students use to discuss their affairs with the university, teaching staff and academic conventions, he stated that Facebook is an important learning technology in the 21st century. Similarly, Mirabolghasemi and Iahad (2013) explored the educational usage of Facebook among university students and they concluded that it was mostly used for both socialization and discuss about their studies. Another "snapshot" study that was conducted by Rosen et al. (2013) indicated that there is a significant difference between the perceived roles of Facebook as a social rather than educational platform, where the students seem much more likely to see Facebook as an education related tool in higher educational settings. In the last few years, many research studies have focused on the influence of Facebook in the teaching and learning process of various subject areas (Meishar-Tal et al. 2012; Rambe and Ng'ambi 2014; Soomro et al. 2014; Reynol 2015). For instance, Meishar-Tal et al. (2012) explored the usability of Facebook as an alternative to a traditional learning management system (LMS) by creating a Facebook group as a course website to present the course content and enable communication among the students and instructors. The results of their study indicated that the students who participated in the study generally expressed satisfaction when learning through Facebook and furthermore they wished that it would be available for the future.

Objectives

In spite of the noteworthy increase in the number of research papers that have studied the current educational uses of Facebook, few studies, however, have focused specifically on the changes in student opinions regarding Facebook usage in education since it is a relatively new learning platform (Archambault and Grudin 2012; Johnston et al. 2013; Khan et al. 2014; Michikyan et al. 2015). There is a broad and growing body of literature that focuses on students' current attitudes and perceptions, which provide advices for imminent learning platforms. However, exploring and understanding how the students' usage of Facebook in educational perspective changes over time also offers critical issues for both researchers and users in order to forecast the future of social networking sites and its social and educational implications (Wilkinson and Thelwall 2010). Thus, the main intention of this paper is to explore the change in the use of Facebook over the past several years. That is to say, to examine how the university students' usage of and opinions about Facebook in education has changed over time. More specifically, it is aimed to investigate how the meaning, usage purposes and the educational usage of Facebook have changed from the year 2009 to 2013. Based upon the body of literature and above-mentioned purposes, the following research questions were examined.

- 1. How has the meaning of Facebook changed over time?
- 2. How has the reason to use Facebook changed over time?
- 3. How has the use of Facebook for educational purposes changed over time?

METHODOLOGY

Research Design

With the intention of answering the questions raised above, the survey method was used in order to obtain information on how the university students' opinion and usage of Facebook have been changed over a time. The survey method was selected since it is the most proper approach that allows opportunity to assemble more in-depth responses (Creswell 1994). The survey was administered at two different times: the first administration was in the year 2009 and after 4 years, the same survey was administrated once more in 2013. Each year a new random sample of students at two different universities in North Cyprus were invited to participate. An online questionnaire was prepared using Google Docs, a commercial open source web survey service. All surveys were conducted in December of the year reported. The students were sent a link of the questionnaire through their university's email accounts. Two additional remainder emails were sent to the students who did not participate the survey. In both universities, the faculty staffs and graduate students were not sampled.

Population

The first phase of the research was conducted with the students in Eastern Mediterranean University in North Cyprus in 2009. Over two-week periods, all the registered students were invited by email to participate in the survey and the researchers obtained 220 responses. The respondent numbers were broken down by gender into 18 male and 2 female English participants,

whereas with the Turkish respondents, the percentage of female students was thirty-five, while the male students were sixty-five percent. The second phase was conducted with 162 students in the fall semester of 2013 in Girne American University located in Girne, a city in North Cyprus. In the second phase, 92 male and 70 female students responded to the online survey. Thus in total 382 students participated.

Data Collection Instrument

The data collection instrument, namely the Facebook Usage Questionnaire was developed by the researcher considering the literature and professional experiences, in order to obtain a better measure of Facebook usage by students. Apart from content validity, in order to enhance the construct validity of the questionnaire, two experts in the field were asked to review the items. The questionnaire includes items about demographic information such as age and gender. Besides, it also contains Facebook usage measures, such as time spent using Facebook, items related to having a Facebook account, and educational identity. The questionnaire pertaining to the students' opinions was re-administered one month later to see if the questionnaire elicited consistent responses between the two time points. This repeated administration of the questionnaire provided assurance through the testretest reliability that the questionnaire was reliable with a correlation coefficient of 0.9. Survey questions were prepared basically to uncover the reasons behind Facebook usage by the university students. There are 13 questions in the survey, some of which are selected response type questions, while the others have been created in the form of open-ended questions. The questionnaire consists of three main themes: (1) means of Facebook, (2) usage of Facebook and (3) educational usage of Facebook.

Data Analysis

Descriptive statistics were used to illustrate the demographic characteristics of the sample and non-parametric analyses were performed to address the research questions. For instance, the Pearson chi-square tests were used to compare the differences between Facebook usage during the years.

RESULTS

Demographic Information

Findings are reported by providing demographic information and descriptive statistics. The total number of respondents was 220 in the first phase of the study, where 67.3 percent were male and 32.7 percent were female. The majority of students were in the age group 20-25 years. Similarly, in the second phase of the study, which was conducted in 2013, the data on the gender and age of Facebook users was analyzed. The percentages of gender and age of the students are presented in Tables 1 and 2, respectively.

Table 1: Change in gender

	2009		2013		
	f	%	f	%	
Male Female	148 72	67.3 32.7	92 70	56.8 43.2	

Table 2: Change in age

	2009		2013	
	f	%	f	%
<20	18	8.2	24	14.8
20-25	167	75.9	122	75.3
26-30	18	8.2	16	9.9
30<	17	7.7	0	0.0

Results indicated that, the second set of data compromised of a total of 162 students, where 56.8 percent were male and 43.2 percent were female, and 75.3 percent of students were between 20 and 25 years old. Both the gender and age of Facebook users has changed over the years by χ^2 = 4.389, p = 0.03 and χ^2 = 16.557, p = 0.00, respectively. The result is significant at p < 0.05. In these samples, a great amount of students use Facebook almost daily. The percentage of time spent on Facebook by the students is presented in Table 3.

Table 3: Time to access Facebook

	2009		2013	
	f	%	\overline{f}	%
I am using Facebook every day	133	60.5	66	40.7
I use Facebook at night	52	23.6	34	21
I use Facebook more on weekends	15	6.8	14	8.6
I use Facebook when I am alone	20	9.1	48	29.6

In the 2009 study, almost sixty percent of the students reported that they are using Facebook daily. However, in the 2013 study only forty percent of the students reported that they are using Facebook every day, and nearly one-third of them (30%) prefer to use Facebook when they are alone. The lower percentages belonged to the statement, "I use Facebook more on weekends" in both of the study samples. The time spent on Facebook has changed over the years by $\chi^2 = 29.769$, p = 0.00, and this result is significant at p < 0.05.

The results were also notable for an overwhelming number of students who access Facebook at home in both, the 2009 and the 2013 study. The percentages for place of access to Facebook are presented in Table 4. In the 2013 study, a significant increase was reported for the statement, "On my mobile phone", almost thirty percent of the students indicated that they accessed Facebook on their smart phones. Whereas in the 2009 study, only 12.8 percent of the students accessed Facebook using mobile devices. The place to access Facebook has changed over the years by $\chi^2 = 39.868$, p = 0.00. The result is significant at p < 0.05.

Changes in Meaning of Facebook

The first research question of this study was, "How has the meaning of Facebook changed over time?" Students were asked to define the meaning of Facebook by giving restricted responses. The majority of students in both the study phases stated that the meaning of Facebook is that of a "communication tool" with the percentages 28.3 percent in the year 2009 and 40.4 percent in the year 2013. As displayed in Table 5, in the 2009 study, twelve percent of the students indicated that the meaning of Facebook for them is "a meeting place", however the percentage of that meaning declined by almost half (6.4%) in the 2013 study. The meaning of Face-

Table 4: Place to access Facebook

	2009		20	2013	
	f	%	\overline{f}	%	
Home	193	49.5	159	47.7	
My workplace	46	11.8	22	6.6	
Campus	101	25.9	52	15.6	
My mobile phone	50	12.8	100	30	

Table 5: Meaning of Facebook

	2009		2013	
	f	%	f	%
Communication tool	1492	8.3	126	40.4
Sharing tool	135	25.7	68	21.8
Meeting Place	63	12.0	20	6.4
A tool which helps loneliness	34	6.5	24	7.7
A tool used for spying on	37	7.0	16	5.1
A tool used for spare time9	3	17.7	54	17.3
No meaning	15	2.9	4	1.3

book has changed over the years: $\chi^2 = 29.769$, p = 0.00. The result is significant at p < 0.05.

Changes in Reasons to Use Facebook

The second research question of this study was, "How has the reason to use Facebook changed over time?" Table 6 displays the students' intentions to use Facebook for the 2009 and 2013 studies. The Pearson chi-square test indicated that the reasons for using Facebook has changed over the years, $\chi^2 = 33.619$, p = 0.00. The result is significant at p < 0.05. Findings of the 2009 study indicated that the students were using Facebook primarily to maintain long-distance social relationships. However, in the 2013 study, the percentage increased to 58.6 percent from 39.5 percent. A significant percentage of the changes were observed on the statement "to communicate with my old friends",

which was found to be 37.7 percent in the 2009 study, whereas the percentage of that statement was 13.2 percent in the 2013 study. On the other hand, the 2013 study revealed that 15.4 percent of the students were indicating that they use Facebook to facilitate academic goals and coordinate study efforts with friends, while it was only 8.6 percent of the students who chose the statement as a reason to use Facebook in 2009. As seen, only a small percent (1.8 %) used Facebook to enhance romantic relationships in the 2009 study, whereas none of the students selected that statement as a reason to use Facebook in 2013.

Changes in Using Facebook for Academic Purposes

The last research question was, "How has the use of Facebook for educational purposes

Table 6: Reasons to use Facebook

	2009		20	2013	
	f	%	f	%	
Maintain long-distance social relationships	87	39.5	95	58.6	
Maintain social relationships with friends on campus	27	12.3	20	12.3	
Facilitate academic goals and coordinates study with friends	19	8.6	25	15.4	
Enhance romantic relationships	4	1.8	0	0.0	
Communicate with old friends	83	37.7	22	13.6	

changed over time?" Table 7 displays the students' academic usage preferences of Facebook for both, the 2009 and 2013 study. The Pearson chi-square test indicated that the usage of academic purposes of Facebook has not changed over the years, $\chi^2 = 7.539$, p = 0.053. The result is not significant at p < 0.05. The highest percentages belong to the statement, "Follow the academic links about my lessons". It was the highest percentages for the 2009 study; similarly, "following academic links on Facebook" with 53.1 percent is the most popular statement for the 2013 study. Besides, the students indicated that they are using Facebook to communicate about the assignment (22.2 %) as an academic usage of Facebook. The frequency of academic usage of Facebook has provided quite remarkable results. Table 8 shows the significant changes of academic usage of Facebook over years. The Pearson chi-square test indicated that the frequency of using Facebook for academic reasons has changed over the years, $\chi^2 = 49.343$, p = 0.00. The result is significant at p < 0.05. The results of the 2013 study indicated that the majority of students (45.7%) often use Facebook

for academic purposes. However, as it can be seen from Table 8, in the 2009 study, only twenty percent of the respondents chose the statement, "I often use Facebook for academic purposes".

As Table 9 shows, in the 2009 study, less than ten percent of the respondents indicated that using Facebook negatively affects their academic performance and distracts them from their studies. On the contrary, there is a clear percentage increase for the statement, "My Facebook use positively affects my academic performance" from the 2009 study to the 2013 study. The majority (50.6%) of the students reported that using Facebook affects their academic performance in a positive way. The Pearson chisquare test indicated that the opinions for this statement has changed over the years, $\chi^2 = 14.956$, p = 0.00. The result is significant at p < 0.05.

The question about the feeling about university staff having Facebook profiles has revealed that the university students favored the academic staff having a Facebook profile. The survey showed that the great majority of the students indicated that they are comfortable and

Table 7: Academic usage of Facebook

	2009		2013	
	f	%	\overline{f}	%
Communicate about academic interest	40	18.2	14	8.6
Arrange study groups	36	16.4	26	16.0
Communicate about assignment	38	17.3	36	22.2
Follow the academic links	106	48.2	86	53.1

Table 8: Time spent on academic usage of Facebook

	2009		20.	2013	
	\overline{f}	%	f	%	
I rarely use Facebook for academic purposes I sometimes use Facebook for academic purposes I often use Facebook for academic purposes	86 90 44	39.1 40.9 20.0	16 72 74	9.9 44.4 45.7	

Table 9: Roles of Facebook on study habits

	2009		2013	
	f	%	f	%
My Facebook use positively affects my academic performance	69	31.4	82	50.6
My Facebook use negatively affects my academic performance, Facebook distracts me from my studies My Facebook use neither positively nor negatively affects my	21	9.5	14	8.6
academic performance	130	59.1	66	40.7

like that the academic staff having a Facebook account. As seen from Table 10, in the 2009 study, more than fifty percent of the respondents feel comfortable with their instructors having Facebook profiles. However, the statement, "I like it" reached fifty percent in 2013. The Pearson chisquare test indicated that the students' feeling about university staff having Facebook profiles has changed over the years, $\chi^2 = 7.859$, p = 0.04. The result is significant at p < 0.05.

As Table 11 displays, the majority of students in both study phases stated that they are very likely to use Facebook to communicate with a staff member through Facebook when they need help related with their research or had a question about the lessons, with 85.1 percent of them saying so in the year 2009 and 90.1 percent in the year 2013. The Pearson chi-square test indicated that the students' opinion on communicating with the instructor over Facebook has not changed over the years, $\chi^2 = 1.851$, p = 0.17. The result is not significant at p < 0.05. Similar results were found in the last question of the survey, which was related to the students' feeling on communicating with friends through Facebook when they need help with research or had a question about the lessons. The Pearson chi-square test indicated that the students' opinion on communicating with classmates over Facebook has changed over the years, $\chi^2 = 10.128$, p = 0.00. The result is significant at p < 0.05. As Table 12 shows, the great majority of the students, ninety percent in the 2009 study and 98.1 percent in the 2013 study, stated that they would prefer to communicate with their friends when

Table 11: Communicate with instructor through Facebook

	2009		2013	
	f	%	f	%
Yes	188	85.5	146	90.1
No	32	14.5	16	9.9

Table 12: Communicate with classmates through Facebook

	2009		201	13	
	f	%	f	%	
Yes	198	90	159	98.1	
Yes No	22	10	3	1.9	

they need help related to research or had a question about the lessons through Facebook.

DISCUSSION

This paper explored whether the usage of Facebook in education has changed over the years from 2009 to 2013. The overall outcomes of this study indicated that usage of Facebook has changed significantly over the years in an expanded and positive manner. The finding is consistent with the findings of Archambault and Grudin (2012), wherein the growth of Facebook usage is not uniform, and there are some differences based on gender, timing, reasons to use and educational usage. It was seen that the time spent on Facebook has been changed over the years for instance the students were using Facebook mostly when they were alone. The place through which the students used to connect to Facebook has changed significantly too, the great majority of students in 2013 study were using smartphones to access Facebook, so this enables them to access Facebook more frequently then before (Sánchez et al. 2014).

The Meaning of Facebook

In most ways, the results of the study showed there was a significant change in the meaning of Facebook over time. The great majority of the students in 2013 study directed that Facebook is a communication tool for them. This outcome is consistent with the findings of Hew (2011), which

Table 10: Perception on academic staff's Facebook profiles

	2009		2013	
	\overline{f}	%	f	%
I like it	84	38.2	80	49.4
I'm comfortable with it	114	51.8	72	44.4
I'm uncomfortable with it	3	1.4	4	2.5
I don't know	19	8.6	6	3.7

showed that Facebook was perceived as a tool to communicate with friends. Besides, this current study showed that the students are not considering Facebook as a "meeting place" compared to the 2009 study. The new features of Facebook allow students to organize all communications using it, such as instant messaging with *Messenger*, voice calls, mobile integration and of course, sending and receiving documents.

Reasons to Use Facebook

Results of this study indicated that the reason to use Facebook has significantly changed over the years, thus the majority of the students reported that they use Facebook to maintain long distance social relationships, with increased percentages in the year 2013. The main reason to use Facebook remained consistent with the literature (Roblyer et al. 2010; Johnston et al. 2011; Guy 2012), which is social communication. Selwyn (2014) Hew (2011) and Sánchez et al. (2014) also concluded that Facebook is mainly used for social purposes: to have a social relationship and to communicate with friends both from the university and daily life. In this current study, the significant change was reported for the statement, "to facilitate academic goals and coordinate study with friends". This shows that the percentage of students who use Facebook for academic purposes and coordination of lessons in the 2013 study is almost twice the percentage in the 2009 study. This indicates that university students' opinions on the educational usage of Facebook significantly increased over time, as they believe that Facebook can be used for academic purposes. These results confirmed the results of other studies in the literature (Irwin et al. 2012; MacCarthy 2012; Michikyan et al. 2015). For instance, McCarthy (2012) in his study revealed that Facebook can be used in educational related coursework in the university, furthermore the results revealed that Facebook has a potential to improve the development of academic connections.

Academic Usage of Facebook

The findings regarding the last research question, the university students in both study phases indicated a positive awareness on the educational usage of Facebook. There is a significant change between the years 2009 and 2013 in an

increasing manner. In the 2013 phase, an increased percentage of the students stated that they prefer to follow academic links related their lessons. Although, there are still many obstacles that prevent a full adoption of Facebook as a learning environment (Manca and Ranieri 2013), students are largely positive to use social networking tools as a learning management system in their courses (Wang et al. 2012). Likewise, Schlenkrich and Sewry (2012) stated that social networking sites could offer both instructors and students with a useful tool with which to develop their communication and contribute to their learning experiences.

Indeed, a particularly remarkable finding is that there is a significant change in the frequency of academic usage of Facebook over the years. The results are consistent with the study of Mazman and Usluel (2010), wherein the university students are eager to use Facebook to share educational related materials with friends. Furthermore, they hold positive views towards Facebook as an educational tool. The significant change in favor of the statement, "Facebook usage positively affects the university students' academic performance" contradicts with most of the studies in the literature (Kirschner and Karpinski 2010; Junco 2012; Paul et al. 2012). The finding that the students feel positive of their instructors having a Facebook profile is also confirmed in the results of Hutchens and Hayes (2014), which revealed that students are comfortable about the instructors' Facebook profile. Furthermore, the percentage of the students who wish to use Facebook to reach the instructors and their friends when they need to communicate about course related issues significantly increased by the year 2013. Similarly, Johnston et al. (2013) in their study have found that the percentage of students has significantly increased over the years for those who prefer Facebook to communicate and debate about academic concerns and classwork with classmates. To sum up, the most important result of this research study was the conclusion obtained from the last survey question. The significant increase in percentage of respondents stated that using Facebook does not negatively affect their academic performance; even more the university students have increased the usage of Facebook. These results are also supported by Selwyn (2014) who proposed that Facebook is attractive for students since it is easy to have education related interactions between students.

CONCLUSION

This study is one of the first registered studies that explore the changes of usage of Facebook over years in educational aspects. The overall results showed that Facebook usage has changed over time in an increasing and positive way. From the year 2009 to the year 2013, educational usage of Facebook has continued to grow and spread among the university student community. That is to say that Facebook can be a place in university education by connecting instructors and students, in addition to the real classroom environment.

Perhaps, the increasing popularity and acceptance of Facebook in the field of education related to the quick widespread usage of it in the other fields as well. During the first years of Facebook, it was seen as only a place for meeting people, chatting and a free time tool in the society. In the early years of Facebook, some countries, organizations and universities blocked or restricted Facebook access during academic working hours, however, now most of the universities have separate social media offices to have competitive advantage and to reach more students. Explicitly, when the society faced the real power of this new social media tool, users came about to respect it since it is the most powerful tool nowadays for business, for advertising and to reach the masses with no cost. In conclusion, it is not enough to see the potential of Facebook in educational settings. The real mission should be developing awareness to use its real power in a purposeful manner in order to reach the real profit of it.

LIMITATIONS

One of the limitations of this research is related with the sample. It was conducted only with undergraduate students from two university districts in North Cyprus, and the results cannot be generalized to users with different demographic or cultural contexts. In addition, data was collected through a survey method. For more indepth analysis of how Facebook's usage changed over the years, interviews or/and learning analytics would be an alternate form of data collection.

RECOMMENDATIONS

The future studies could examine different populations with various demographic and cultural backgrounds. Although the survey method is powerful to access the population, it does not provide in-depth analysis like interview sessions. Future research could attempt to replicate the same study in the following years as well as with other social media tools such as Twitter, Google Plus or Pinterest, to see the differences among these social networking sites.

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