

OVERVIEW OF SOCIAL MEDIA RESEARCH: A CONTENT ANALYSIS STUDY

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Abstract

In today's society, the use of social media and social media tools begins from a very young age and pervades our adult lives, reaching a point where they are perceived to be indispensable for human life. The development and prevalent use of social media and social media tools has become a focal point for researchers from different areas of expertise and has become the principal topic for numerous scientific research studies. In the light of this information, this research study aims to evaluate the research about social media and social media tools conducted between the years of 2010 and 2014, based on various criteria. This is a content analysis study and for the present study, 223 research papers were retrieved from the EBSCO database. These retrieved research papers were analyzed and interpreted based on the identified criteria.

Keywords: Social Media, Social Network, Facebook, Twitter

1. INTRODUCTION

1.1 Social Media and Characteristics of Social Media

Through the development and prevalent use of technology, the concept of social media has started to come into prominence for modern society. These days, people can easily establish communication with other internet users, exchange files and information and achieve many different goals by using social media and social media tools. Erol, Akadal, Olgun and Reis (2012) stated that the use of social networks increases every day and has become a virtual living space, especially for young people. In the current literature on the topic, there are differing opinions about the concept and aims related to the use of social media.

Social media is broadly defined as a general concept of media systems which facilitate the transition from uni-directional information sharing by resources such as television or newspapers into online bi-directional and simultaneous information sharing through use of new technological platforms built on the foundations of web 2.0 (Wikipedia, 2014). In the present day, social networks such as Facebook and Twitter are good examples of these systems. Similar to this explanation, Kuzeci (2010) defined social media as a system that provides the opportunity for individuals to participate in online sharing on a common platform. Kirkbir (2013) described social media as a system which facilitates the interaction between individuals and groups and develops social relations. Boyd & Ellison (2007) and Keser, Ozdamli, Bicen & Demirok (2010) indicated that social media provide the opportunity for users to establish a profile in a system and communicate with other users in this system.

Ozkan & McKenzie (2008) and Can (2014) explained the general characteristics of social media using the following statements:

- Social media provides internet users with the opportunity to communicate by sharing files such as e-mail, chat, video and photos online.
- Social media provides internet users with the opportunity to freely organize their profiles as they choose.
- Most social media applications and software can be used freely.
- Social media applications and software update their system regulations and plugins based on feedback from internet users.
- Most social media applications and software provide the opportunity for internet users to adjust their profile confidentiality and access settings.

These days, social media applications and software that conform to the characteristics given above are used intensively by users ranging from the very young through to adults. In Table 1, frequently used social media applications and software are provided:

Table 1. Applications and Software of Social Media

	Facebook - www.facebook.com		Badoo - www.badoo.com
	Twitter - www.twitter.com		Hi5 - www.hi5.com
	Instagram - www.instagram.com		LinkedIn - www.linkedin.com
	Myspace - www.myspace.com		Netlog - www.twoo.com
	YouTube - www.youtube.com		Google Plus - plus.google.com

The social media applications and software provided in Table 1 are differentiated from each other based on their general characteristics and purpose of use. According to the information on Wikipedia, the social media applications and software provided in Table 1 can be explained in detail as the following:

- Facebook: Social-sharing website established by Marc Zuckerberg in February 2004. Facebook was established with the aim of providing the opportunity for communicating with other people and sharing information?
- Twitter: Defined as a social network and microblog. Twitter provides the opportunity for users to write messages using a maximum of 140 characters and it is a tool for communication that can also be used in collaboration with other different tools.
- Instagram: Instagram is a free application for photo sharing providing the opportunity to users to create different visual effects and share their photos online.
- Myspace: A social communication network which provides its users with the opportunity to establish communication and make friendships by sharing components such as photos, videos and blogs in a virtual environment.
- YouTube: Defined as a video website. On YouTube, internet users from all over the world have the opportunity to upload their videos to the system. Furthermore, users have the opportunity to watch other videos uploaded by other internet users, rate the videos and make comments.
- Badoo: Defined as a social media tool that provides many people with the opportunity to engage in various sharing and interactive activities in an online platform.
- Hi5: Defined as an application that provides its users with the opportunity to interact in a common virtual space similar to the Facebook and Badoo social networks.
- LinkedIn: LinkedIn, which was established in December 2002, is defined as a professional social website that provides people from the business world with the opportunity to communicate and share information.
- Netlog: In this social network, users can manage their own pages as with the Facebook, Badoo and Hi5 networks and communicate with other users.
- Google Plus: Google plus was established by Google and is known as a social sharing website.

Through analysis of their general characteristics, opportunities provided to users and usage rates, it can be clearly seen that social media applications and software have come to a point where they are an integral part of human life. Individuals can establish communication, share content such as photos, videos, messages and manage their own content and pages in social networks by using these opportunities. More importantly, individuals canalize the activities which they engage in daily life to the virtual world through social media. While this wide and prevalent form of use provides many advantages to users, it may also constitute a threat to society through its negative aspects.

1.2. Negative Sides of Social Media for Human Life and Society

Internet addiction is one of the most significant disadvantages of social media and social media tools for human life. Young (1996) stated that as with drug, gambling and alcohol addiction, social media and internet addiction can cause problems such as a lack of academic success, decrease in work performance and marital problems. Young emphasized that this form of addiction is a significant threat to society.

Ozturk, Odabasi, Eraslan, Genc and Kalyoncu (2007) stated that internet addiction is a form of addiction that can impact all ages but indicated that internet addiction can mostly be seen in adolescents. Similarly, Johannson & Gotestam (2004), Cengizhan (2005) and Severino & Craparob (2012) reported that the excessive use of social media negatively affects adolescents' social lives, physical and psychological development, academic success and can lead to a breakdown of peer and family relationships.

There are many factors leading to the emergence of internet addiction as there are many factors which are known to trigger alcohol and gambling addiction. When general opinions are examined from previous studies, the feeling of individual loneliness is one of the basic reasons for spending time on social media "at the level of addiction". Individuals try to compensate for their lack of actual relationships and social activities by fulfilling them in a virtual environment. Esen (2010) indicated that while some researchers reported that internet addiction does not lead to an increase in the level of loneliness, it is a consequence of loneliness; some researchers indicate the reverse of this. Nevertheless, İnan (2010) stated that the excessive use of social media applications among individuals is related to many psychological and sociological factors and indicated that the primary reasons are easy and free access to the internet, alternatives for chat and communication, social network gaming especially gambling, pornographic elements, absence of a control mechanism for social sharing websites, depression, the feeling of loneliness and the need for socializing. Additionally, Henderson (2001) stated that these components that lead to excessive use of social media applications and software also lead to problems such as virtual sex addiction and sex crimes.

1.3. Application Areas of Social Media

These days, social media and social media tools are frequently used in different areas to fulfill many different purposes. For instance, the use of social networks such as Facebook and Twitter in education and teaching is a contemporary trending research topic. Bicen (2012) examined the effects of Facebook usage on teachers' in-service training and discovered that such applications can lead to positive effects.

According to İnan (2010) and Ruiz-Molina, Garcia & Pons (2013) aims of widely using internet and social media are: communication between all computers that are connected with a computer network; spontaneous mutual information sharing; access to unlimited resources such as information, articles or reports; book; conferences; announcements and registrations; access to information banks and archives; access to library resources; shopping; travel reservations; various formal application processes; the opportunity to access experts from many different fields; tracking the news.

The use of social media has become prevalent and indispensable, not only in education and teaching practices, but also in politics, commercial institutions and foundations, as well as product advertisements. In our modern society, product advertisements and marketing processes are used in social media and this method provides the opportunity to reach a much wider audience. Furthermore,

political parties and individuals in the election process effectively use social media to reach a broader audience.

According to the data in research publications, the use of social media applications and social media tools has increased dramatically by different target groups for different purposes. This wide and prevalent usage has led to scientific studies based on social media and applications. Although there are many scientific studies with different properties based on social media and applications, content analysis studies cannot currently be found in the publications covering this issue. In the light of this information and based on current requirements, the aim of this research is to evaluate the existing research about social media and social media tools conducted between the years of 2010 and 2014. Based on this general goal, the following questions will be answered:

What is the distribution of social media research carried out between the years of 2010 and 2014 in terms of:

1. Year of publication
2. Country
3. Number of authors
4. Research topic
5. Method
6. Research model
7. Data collection method
8. Target audience
9. Number of references

2. METHOD

This research is a study that used the document examination method to evaluate research on the subject of social media and social media tools conducted between the years of 2010 and 2014, based on different criteria and through content analysis. Through this general aim, 223 research articles were retrieved from the EBSCO database, they were examined based on the identified criteria and then analyzed and interpreted using the 16th version of the Statistical Package for Social Sciences (SPSS). In this content analysis study, the reason for selecting EBSCO and ScienceDirect as databases was that these databases are well-respected, reliable and also provide the opportunity for quick and easy access to scientific studies.

The scientific research examined in this study was limited to the years between 2010 and 2014 as the year of publication and limited to the EBSCO database as the document examination method. The keywords used to retrieve the scientific studies from EBSCO were: "social media", "social network", "social sharing websites", "Facebook" and "Twitter". As a result of the search process, 312 studies were retrieved from the database, however, 89 of the studies were not related with the issue and were therefore excluded from the research.

3. RESULTS

3.2. Year of Publication

The distribution of the scientific studies on social media and social media tools in terms of year of publication between 2010 and 2014 is provided in detail in Figure 1.

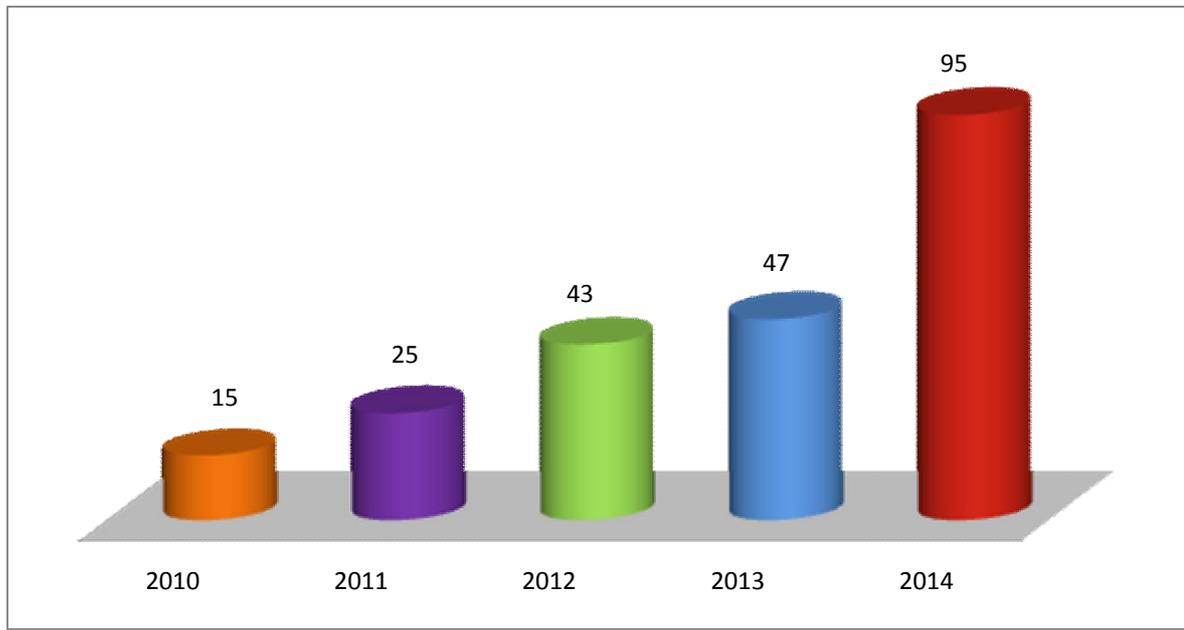


Figure1. Year of Publication

According to the data provided in Figure 1, it can be seen that most of the studies on social media and social media tools were conducted in 2014. Based on the same data, the increase in the number of studies related with social media over this period maybe related to development and innovation in technology and the more prevalent use of mobile devices.

3.3. Country

The distribution of the scientific studies on social media and social media tools in terms of the countries in which they were conducted is provided in Table 2.

Table 2.Country

Country	f	Country	f
USA	96	Italy	3
China	15	Mexico	3
Korea	12	Norway	2
Germany	11	Greece	2
Taiwan	10	Malaysia	2
Spain	10	Thaliand	2
Canada	7	Saudi Arabia	2
United Kingdom	6	Belgium	2
Holland	5	Jordan	1
South Korea	5	Portugal	1
Australia	4	Ukraine	1

Israel	4	Pakistan	1
Singapore	3	Brazil	1
Finland	3	Serbia	1
Turkey	3	Poland	1
France	3	North Cyprus	1

According to the data provided in Table 2, most of the studies on social media and social media tools were conducted in the United States. Based on the same data, studies on social media and social media tools were also conducted intensively in China, Korea, Germany, Taiwan and Spain. Conversely, it was observed that the countries that have the lowest number of studies on social media and social media tools were Jordan, Portugal, Ukraine, Pakistan, Brasil, Serbia, Poland and North Cyprus.

3.4. Number of Authors

Data related to the scientific studies on social media and social media tools in terms of the number of authors is provided in Table 3.

Table 3. Number of Authors

Number of Authors	f
2 Authors	88
3 Authors	56
1 Author	32
4 Authors	30
5 Authors	17

According to the data in Table 3, the number of publications with two and three authors was predominant. The number of individual studies was relatively small when compared to the total number of studies. This obtained result could be interpreted to mean that researchers generally prefer a cooperative process of research/study.

3.5. Research Topic

The topics covered in social media research are provided in Table 4.

Table 4. Research Topics

Research Topics	f
Social Media and Education	52
Social Media and Psychology	49
Social Media and Communication	34
Social Media and Economics	31
Social Media and Sociology	22
Social Media and Addiction	20
Social Media and Politics	13
Social Media and Child Development	2

According to the data in Table 4, researchers studied the topic of education and social media most intensively. Based on the same data, it can be seen that psychology, communication and economics were also the most studied topics in the research.

3.6. Method

Data related to the research method used in social media research is provided in detail in Figure 2.

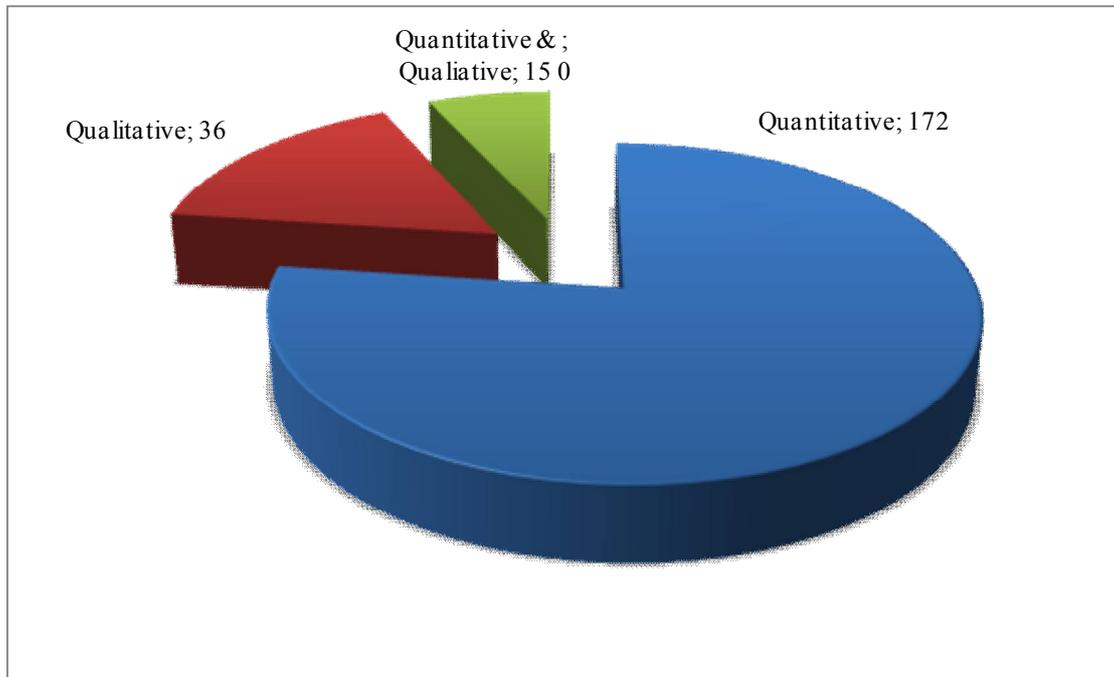


Figure 2. Research Method

According to the data provided in Figure 2, it can be seen that quantitative research methods are mostly preferred to perform social media research. While the number of qualitative studies was 36, the number of mixed studies was quite small when compared to the overall number of studies.

3.7. Research Model

Data related to the research models used in social media research is provided in table 5.

Table 5. Research Model

Research Model	f
Survey	98
Semi-Experimental	45
Experimental	42
Literature Review	36
Scale	2

According to the data provided in Table 5, it can be seen that the screening model is the most intensively used research model in social media research. According to the same table, the number of studies using experimental and semi-experimental models was high when compared to the overall number of studies. The number of studies that used scaling techniques for social media and the use of social media was minimal compared to the overall number of studies.

3.8. Data Collection Tools

Data collection tools used in social media research are provided in Table 6.

Table 6. Data Collection Tools

Data Collection Tools	f
Scale	78
Survey	42
Document Examination	36
Achievement Test and Interview	22
Pretest- Posttest	21
Survey and Interview	18
Observation and Interview	6

According to the data provided in Table 6, it can be seen that scales are the mostly used data collection method in social media research. Based on the same data, the number of studies that used surveys as data collection method is also high. It can be seen that the number of studies that used observation and interview as the data collection method was quite small.

3.9. Target Mass (Sample Group)

Data related to the identified target audience in social media research is provided in Table 7 in detail.

Table 7. Target Mass (Sample Group)

Target Group (Sample Group)	f
University Students	78
Secondary Education Students	44
Masters Students	16
Lecturers	15
Secondary Education Students and their Teachers	12
Adults	12
Elementary School Students	10

According to the data provided in Table 7, the sample group that was most preferred by researchers on social media consisted of university students. The number of studies that used elementary school students as the sample group was quite small when compared with the overall total.

3.10. Number of References

The number of references used in social media research is provided in Figure 3 in detail. When the data in Figure 3 is examined, it can be seen that the number of references most used in social media studies was between 21 and 30. In figure 3, it has been also revealed that the number of studies with 41-50 references was high. The number of studies with 41-50 references was only 4.

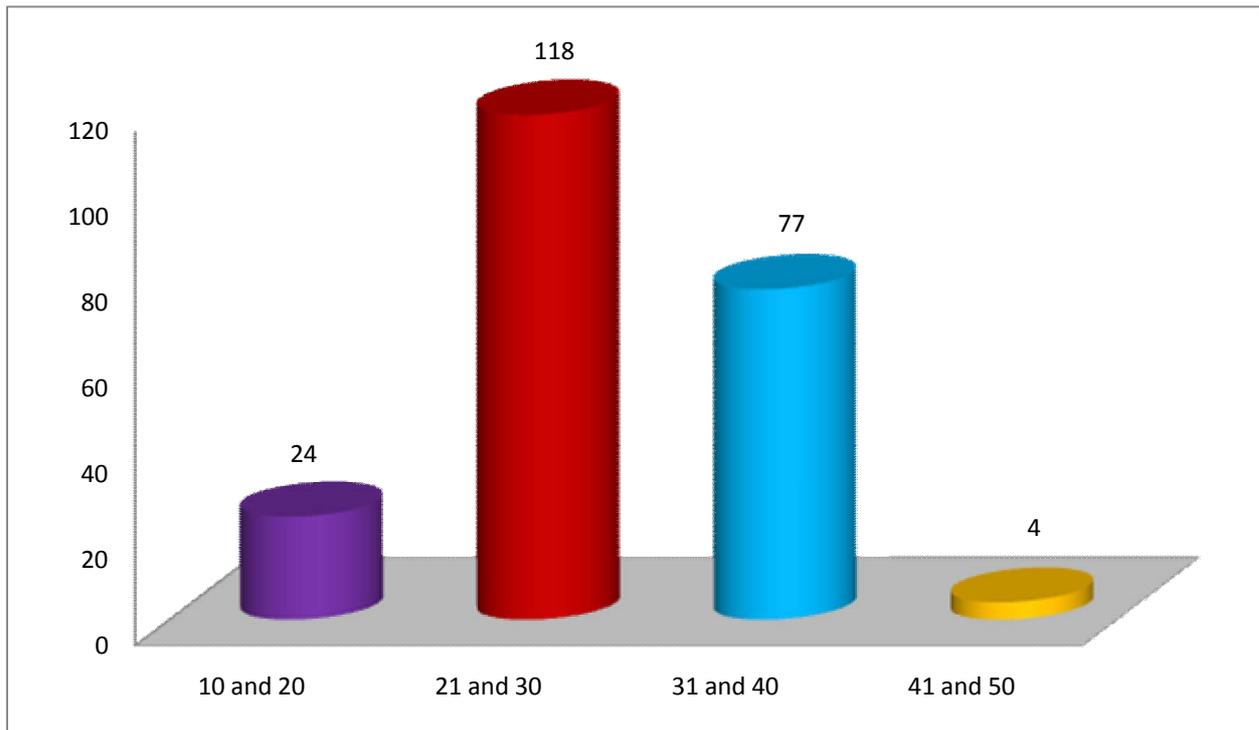


Figure 3. Number of References

4. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The following conclusions and recommendations can be drawn from this study, which aimed to evaluate previous studies on social media through content analysis. It was determined that social media research continued to increase throughout the period between 2010 and 2014. When the research and its related data are examined, it can be assumed that this increase will continue in the same way in the future. Therefore, orientation about this issue should be determined through similar future studies.

It was revealed that most of the studies on social media were conducted in the United States. Nevertheless, studies on social media were also conducted intensively in China, Korea, Germany, Taiwan and Spain. In North Cyprus, the number of studies conducted on this issue is extremely low. Therefore, one can conclude that the number of studies related to social media applications from different perspectives should be increased in our country as well.

The number of publications related to social media by 2 or 3 authors was generally predominant. The number of individual studies was quite small compared to the overall number of studies. For future studies, it is recommended that cooperative studies should be continued to be conducted.

Another finding was that researchers mostly focus on education and social media. Based on the same findings, the number of social media research studies related to psychology, communication and business was also high. Social media has a flexible structure based on its broad characteristics and application areas, therefore, social media should be integrated to other research topics and the effects of social media might be revealed.

According to the results of the study, it was found that quantitative methods are generally used in social media research. The number of qualitative and mixed research studies is low when compared to

the overall total. Similar to this finding, Goktas, Kucuk, Aydemir, Telli, Arpacik, Yildirim and Reisoglu (2012) discovered that the number of quantitative studies was also higher than the number of qualitative and mixed studies in the area of educational technology. These obtained results show that quantitative studies are also preferred in the area of educational technology as well. For future studies covering the same subject, it is important that the number of qualitative and mixed studies is increased in order to be able to reveal different results.

Another finding of the study indicated that screening models were widely used in social media research. Nevertheless, the number of experimental and semi-experimental methods was also high. For future studies about the same issues, an increase in the number of experimental studies is recommended in order to obtain more effective and satisfying results.

According to the results of the study, it can be seen that scales are the data collection method mostly used in social media research. Based on the same data, the number of studies that used surveys as a data collection method is also high. Similar to these findings, Goktas and colleagues (2012) also indicated that surveys were also the most preferred data collection tools in the educational technology area, however, observation techniques were rarely used as a data collection tool. In this respect, it can be clearly seen that obtained results from different studies have revealed consistent results. For future studies about social media, the combined use of different data collection tools is recommended in order to obtain clearer and wider results.

According to another finding of the study, the sample group most preferred by social media researches researchers consisted of university students. Similar to this finding, Goktas and colleagues (2012) also indicated that the sample group for studies on educational technology mostly consisted of university undergraduate students. Furthermore, in their content analysis study about educational technology research, Cakmak, Cebi, Mihci, Gunbatar and Akcayir (2013) indicated that researchers generally preferred university students for their sample groups. Future studies on social media research should utilize different sample groups in order to examine the effects of social media applications on individuals who have different characteristics, vocations and ages.

According to the findings of this study, it can be seen that the most used number of references in social media research studies was between 21 and 40, whereas the number of studies that used more than 41 references was quite low. Benefiting from data in previous publications contributes to the reliability of the scientific study. Therefore, in studies about both this subject and other subjects, academic literature should not be ignored and researchers should take the opportunity to benefit from actual resources.

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