

## ARTICLE

# AN OVERVIEW OF ACADEMIC STUDIES WHICH EXAMINED WEB 2.0, SOCIAL MEDIA AND SOCIAL NETWORK

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## ABSTRACT

The objective of this study is to provide a description of studies which examined Web 2.0, social media and social network between the years 2011 and 2017. The study uses descriptive survey model and is described by content analysis which is a qualitative research method. "Web 2.0, social media, social networking, social network and Facebook" keywords were used while scanning the articles. The sample of the study includes 141 scientific articles in Turkish language which can be found Google scholar, Dergi Park and Ulakbim Turkish databases. Percentage and frequency values were used in analyzing the data obtained from the studies. The study concluded that literature search and survey studies were conducted on Web 2.0, social media and social network in Turkey although experimental studies were not at desired level, that Facebook, Twitter and YouTube tools were studied in particular, and that the scientific studies examined in the study used/desired to use web 2.0, social media and social network with the purpose of education, communication and rapid sharing of news/information. It is expected that this study will light the way of other researchers who are considering conducting research in this area.

## INTRODUCTION

### KEY WORDS

Web 2.0; Social Media;  
Social Network; Content  
Analysis

One of the fundamental needs of individuals is the desire to interact with people around them and share their knowledge, feelings and opinions [1]. One important opportunity provided by Web 2.0 applications is that it ensures bi-lateral, simultaneous social interaction and information sharing [2][3][4].

Web 2.0 is an idea which was started as a brainstorm in a conference session, and was first used by Tim O'Reilly in 2004 [5]. According to O'Reilly, this area which is also expressed as the concept of Web 2.0, social media and social network includes new generation internet applications.

The idea of social media, which is the leading most popular tool that creates new media, was developed based on the web 2.0 concept [6]. According to Boyd and Ellison [7] what makes social media environments unique is not that it allows for the users to meet strangers, but that it allows for the users to express themselves. Social media is defined as "the 21st century term which is used with the purpose of communication, cooperation and creative expression, emphasizes the social aspect of internet, and expresses several communication network instruments" [8][9][10].

Today social media is becoming very important and growing in the world in an unprecedented scale, as a result of which it became more complicated. [Fig. 1] gives the "Social Media Map" report prepared by Overdrive Interactive [11] which includes 230 social media tools in 23 categories.

The innovative part of the report which is being published since 2013 is that in 2017 "messaging" category was added. In addition, social networks which are very popular today are included in the report as a separate "networks" category.

As one of the most remarkable technological phenomena, social networks is a type of social media and its past is older than known. Social network term was first used in 1954 by Barnes to define the relation of a person with other persons in his environment. According to Barnes, social networks consist of individuals who are in interaction with each other and bear psychological importance for the person [12].

The first site examples that suit social network definition were "Classmates.com" (1995) and "SixDegrees.com" (1997) sites. Classmates.com allowed for its users to find their past classmates whereas SixDegrees.com allowed for its users to create profile and list friends [13][14].

Today social network sites are member-based and interactive websites which ensure communication between its users through innovative ways such as sending profile information such as username and photograph, sending general or online messages or sharing photograph and videos online [15][16].

The most popular social network site today is Facebook platform which was established in 2004 by Mark Zuckerberg and his friends. [Fig. 2] gives the "Digital in 2017 Global Overview" report prepared by We Are Social and Hoot suite which shows that Facebook social network site has 1.871 billion active uses.

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3. What is the distribution of studies conducted on Web 2.0, social media and social network according to universities?
4. What is the distribution of studies conducted on Web 2.0, social media and social network according to the level of chosen samples?
5. What is the distribution of studies conducted on Web 2.0, social media and social network according to research methods?
6. What is the distribution of studies conducted on Web 2.0, social media and social network according to data collection tools?
7. What is the distribution of studies conducted on Web 2.0, social media and social network according to subjects?
8. What is the distribution of studies conducted on Web 2.0, social media and social network according to types of tools?
9. What is the distribution of studies conducted on Web 2.0, social media and social network according to the usage of the instruments by the sample?

## MATERIALS AND METHODS

### Model of the research

This study was conducted with descriptive survey model. Survey model aims at describing an existing situation as it is without trying to create any change [17].

In addition, the study includes content analysis which is a qualitative research model. As a qualitative research method, content analysis is a systematic, impartial and numerical analysis aiming at measuring the variables in a text [18].

### The scope of the study

An attempt is made to analyses and explain the articles on Web 2.0, social media and social network from the perspective of a number of variables. When surveying the articles, Web 2.0, social media, social networking, social network and Facebook keywords were used. The limitation of the study is that the articles analyzed in the study are those published in Turkey until the end of May 2017. The sample of the study consists of 141 scientific articles in Turkish language from google scholar, DergiPark and Ulakbim Turkish databases.

### Collection of data

In order to examine the articles, researchers created an "Article Information Collection Form". The articles were examined under 9 headings in terms of years, institutions, universities, level of chosen sample, used method, data collection tools, subject area, type of tools and usage purpose of the sample.

### Analysis of data

Data obtained from studies examined with content analysis were analyzed using percentage and frequency values. The obtained data are collected in MS Excel file. As regards the data, the frequencies and percentages were calculated which would match each research question. In the end, the data obtained were made into graphics.

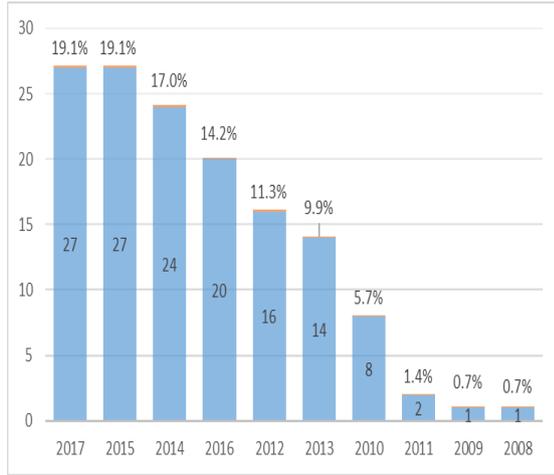
## RESULTS

### Findings

Findings obtained as a result of describing the studies on Web 2.0, social media and social network are presented in graphics below and the especially interesting points are interpreted.

Distribution of studies according to years

[Fig. 3] gives the distribution of studies in the research according to years.

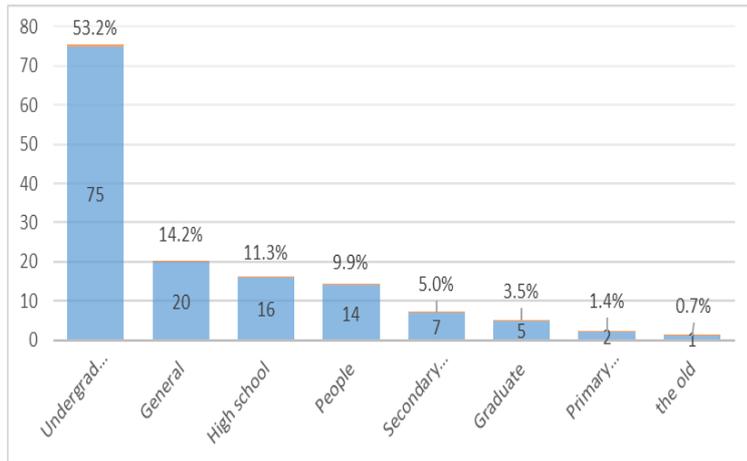


**Fig. 3:** Distribution of studies according to years.

When [Fig. 3] is examined, it is seen that in the years 2013-14-15, studies on Web 2.0, social media and social network covered by this paper considerably increased.

Distribution of the studies according to their institutions

The distribution of the institutions where the covered studies were conducted is given in [Fig. 4].



**Fig. 4:** Distribution of studies according to their institutions.

When [Fig. 4] is examined, it can be seen that more than half of the studies targeted undergraduate level of universities (53,2%). This data is followed by case studies which were conducted without stating any institution with 14.2 percent. Likewise, 9.9% of studies were conducted by individuals shown by "people" data who are chosen from a number of geographical regions of Turkey without stating any institution.

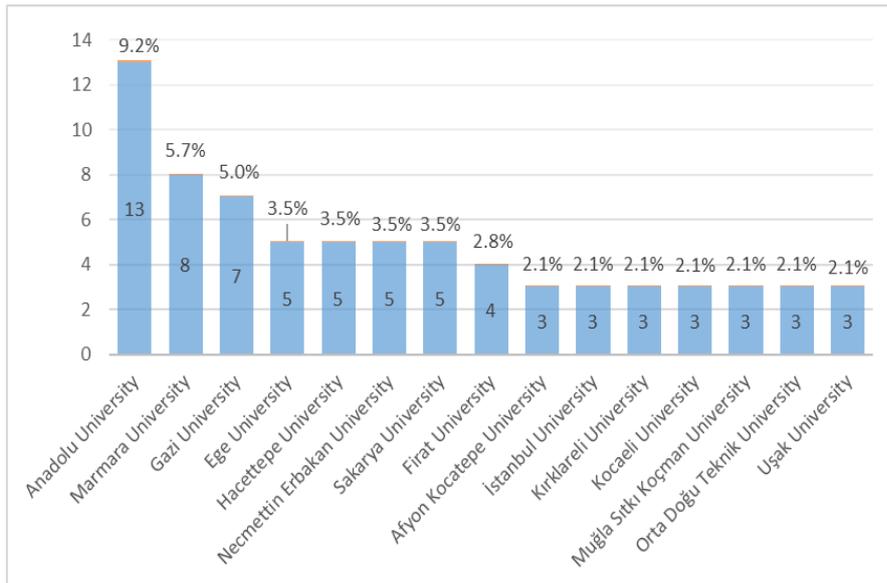
Distribution according to the universities where studies are conducted

The distribution of studies covered in the paper according to the universities where they were conducted is given in [Fig. 5].

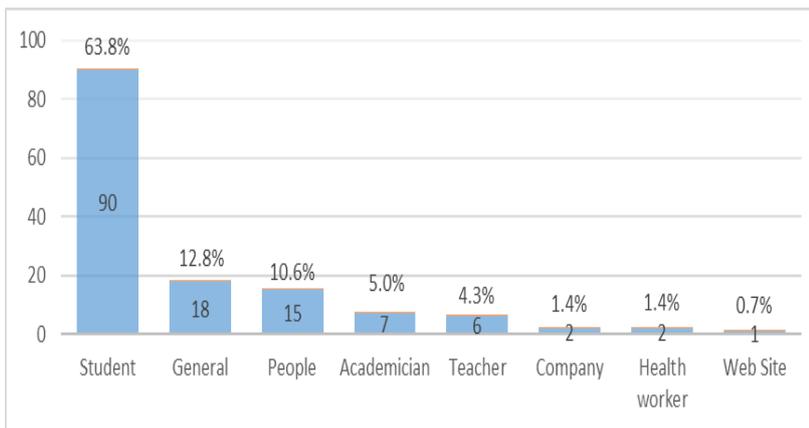
An examination of [Fig. 5] shows that especially at Anatolia University (9.2%) studies on Web 2.0, social media and social network covered by the paper are published in Turkish language.

*Distribution of studies according to the chosen sample level*

[Fig. 6] gives the distribution of the studies in the paper according to the chosen sample level.



**Fig. 5:** Distribution of studies according to the universities where they were conducted.

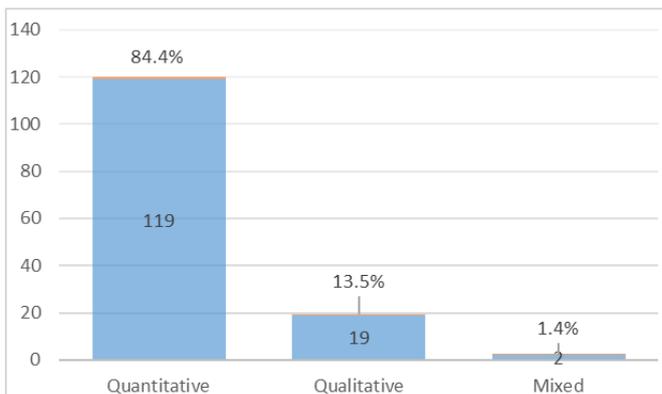


**Fig. 6:** Distribution of the studies according to the chosen sample level.

When [Fig. 6] is examined, it can be seen that in the studies covered by the paper, most studies on Web 2.0, social media and social network are conducted by taking sample from students (63.8%).

*Distribution of studies according to research models*

[Fig. 7] gives the distribution of studies covered in the paper according to research models.

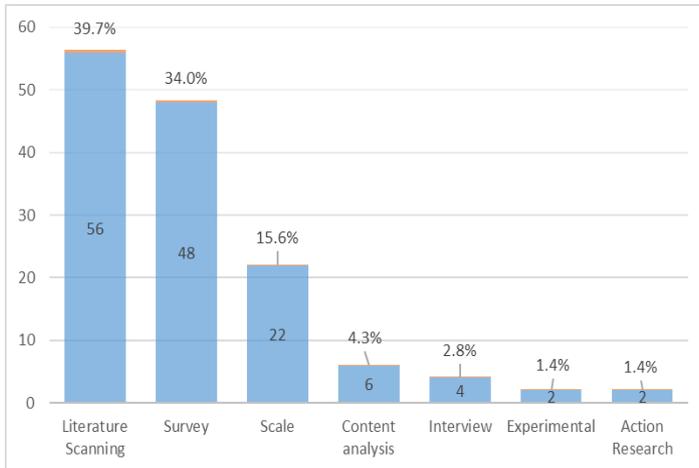


**Fig. 7:** Distribution of studies according to research models.

When [Fig. 7] is examined, it can be seen that among the studies covered by the research, studies on Web 2.0, social media and social network are mostly conducted with quantitative methods (84.4%).

*Distribution of studies according to data collection tools*

[Fig. 8] gives the distribution of studies covered in the paper according to data collection tools.

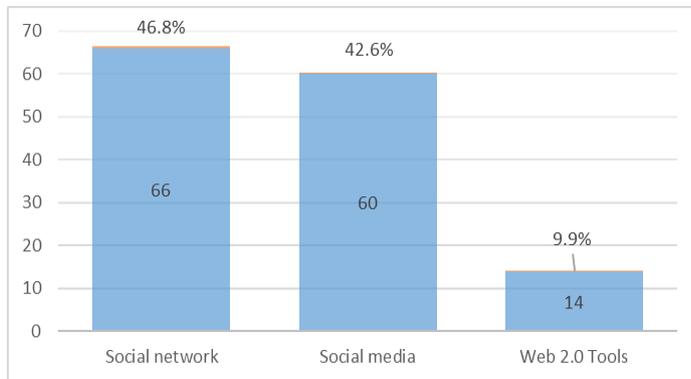


**Fig. 8:** Distribution of studies according to data collection tools.

When [Fig. 8] is examined, it can be seen that among the studies covered by this paper, the most widely used data collection tools were literature search (39.7%) and surveys (34.0%) and that experimental studies are nearly non-existent.

*Distribution of studies according to their subjects*

[Fig. 9] gives the distribution of studies covered in the paper according to their subjects.



**Fig. 9:** Distribution of studies according to their subjects.

When [Fig. 9] is examined, it can be seen that 46.8% of the studies covered by the paper examined social networks, 42.6% studies social media and 9.9% dealt with web 2.0.

*Distribution of studies according to examined types of tool*

[Fig. 10] gives the distribution of studies covered in the paper according to examined types of tool.

When [Fig. 10] is examined, it can be seen that studies covered in this paper especially took Facebook (88,7%), Twitter (57,4%) and YouTube (27,7%) tools as subject and, in addition, WhatsApp was studied by 15.6% as an instant messaging tool.

*Distribution of studies according to the usage purpose of the sample*

[Fig. 11] gives the distribution of studies covered in the paper according to the usage purpose of the sample.

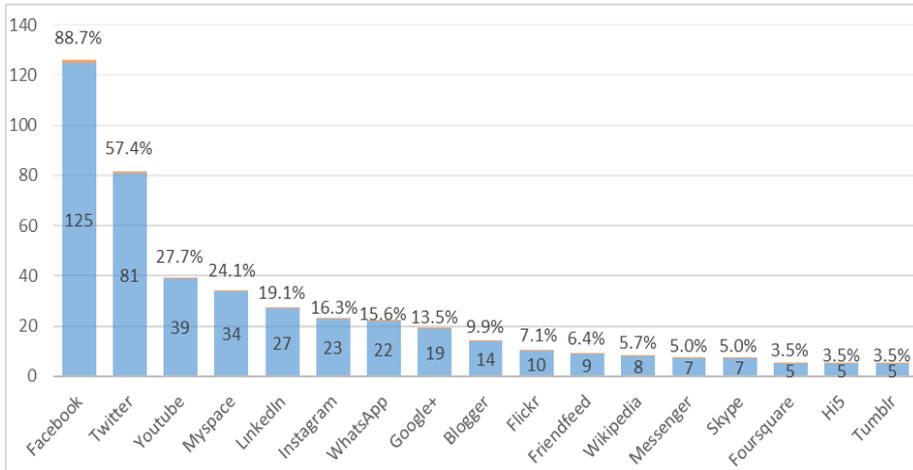


Fig. 10: Distribution of studies according to examined types of tool.

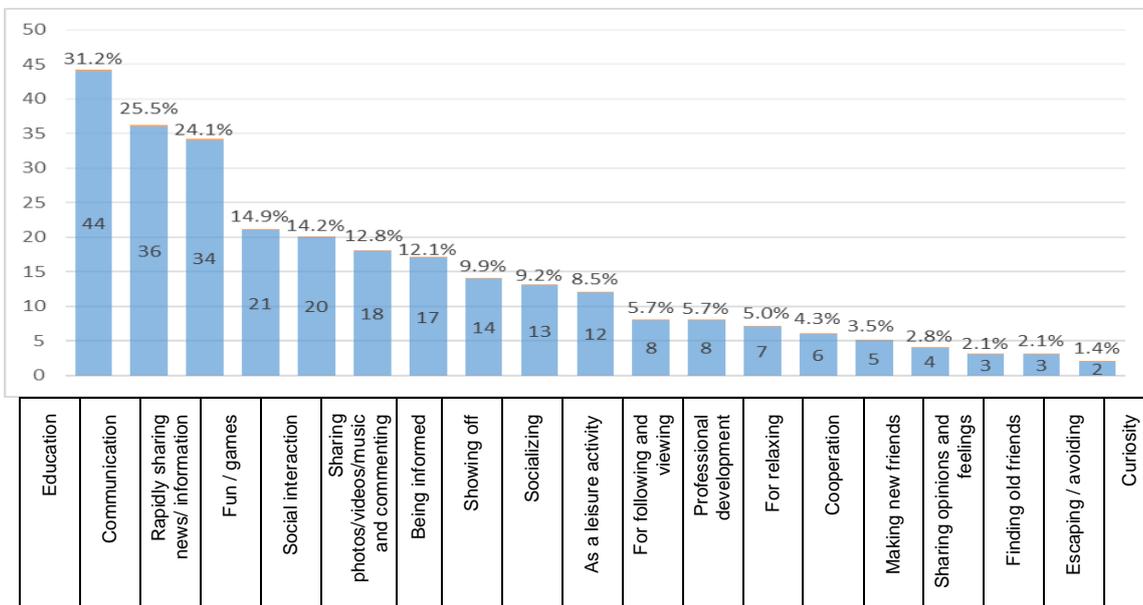


Fig. 11: Distribution of studies according to the usage purpose of the sample.

When [Fig. 11] is examined, it is seen that the sample group chosen in the studies covered by the paper mostly used/wanted to use Web 2.0, social media and social network for education purposes (31.2%) followed by communication (25.5%) and fast news/information sharing.

## DISCUSSION

The number of articles published in Turkey between the years 2011 and 2017 on web 2.0, social media and social network are examined. A total of 141 scientific articles are reached. The results are given, interpreted and some recommendations are made.

It is concluded that the number of studies increased considerably in the years 2013-14-15, that undergraduate level of universities were targeted by 53.2% and that especially in Anatolia University (9.2%) many studies were conducted on web 2.0, social media and social network tools.

In the study, it is concluded that especially students were chosen as sample (63.8%) to study web 2.0, social media and social network. There are several studies conducted on students in 2016-2017 in the literature which support this result [19][20][21]. Data were obtained indicating that researchers should also conduct scientific studies on teachers, scholars, managers and families.

It is concluded that the studies on web 2.0, social media and social network were mostly conducted using quantitative methods (84.4%). Data were obtained indicating that it is needed that researchers who will study in this area should conduct their studies with mixed and qualitative data.

It is concluded that studies mostly used literature search (39.7%) and surveys (34.0) and experimental studies were almost non-existent. More experimental studies can be conducted on web 2.0, social media and social network by researchers.

It is concluded that studies 46.8% of the studies were on social networks, 42.6% were on social media and 9.9% were on Web 2.0. The fact that Facebook social network has the highest number of active users in the world and in Turkey was the most important factor in obtaining this result [22].

It is concluded that studies mostly examined Facebook (88,7%), Twitter (57,4%) and YouTube (27,7%) tools as well as an instant messaging tool, WhatsApp, with 15.6 percent. Today wide communication networks are established with the help of several social media tools such as Facebook, Twitter, LinkedIn, Google+, YouTube etc. which allows for rapid sharing spreading and even debating on any content; these facilities allow for the intense usage of such tools. In addition, scientific studies can be conducted by researchers on mobile instant messaging applications (WhatsApp, Viber, Snapchat etc.) whose popularity is increasing rapidly.

It is concluded that the sample group chosen in the studies used/wanted to use web 2.0, social media and social network mostly for education (31.2%), communication (25.5%) and rapid sharing of news/information (24.1%). Social media has many features that can improve education processes. Users can use social network structures for different purposes. Social networks can generally be used for effectively sharing materials, following daily events, news, persons or groups, and participating in discussion media to support cooperative learning, researching, discussion skills, questioning, critical thinking and problem solving skills [23][24][25][26].

#### CONFLICT OF INTEREST

There is no conflict of interest.

#### ACKNOWLEDGEMENTS

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#### FINANCIAL DISCLOSURE

None

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