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## TURKISH UNIVERSITIES' USE OF TWITTER: A CONTENT ANALYSIS

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### Abstract

Universities have become to use social media for various reasons. These are marketing, communicating with their students, and for supporting education facilities. The aim of this study is to analyse the usage of Twitter by universities in Turkey from a marketing perspective. Official Twitter accounts of 40 universities (20 of them are state universities, 20 of them are foundation universities) analysed by Nvivo 11 for the study. Qualitative data was collected for six months. These tweets were categorised under defined groups. Also the content of social media conversations and the interactivity of Twitter usage were analysed. Findings show that the ratio of promotional tweets is higher when compared to other groups reveals that Twitter accounts of universities were mostly used for marketing and branding. Another result is 40% of both state and foundation universities are qualified for active category.

**Keywords:** *Universities, Marketing, Social Media, Twitter.*

## TÜRKİYE'DEKİ ÜNİVERSİTELERİN TWITTER KULLANIMI: BİR İÇERİK ANALİZİ

### Öz

Üniversiteler sosyal medyayı, mevcut öğrencilerle etkileşim, pazarlama, öğrenme ve öğretimi destekleme gibi farklı konularda kullanmaktadırlar. Bu çalışma Türkiye'deki üniversitelerin Twitter kullanımını pazarlama perspektifinden analiz etmeyi amaçlamaktadır. Çalışma için 40 üniversitenin (20 vakıf ve 20 devlet üniversitesi) Twitter hesabı incelenmiş ve 6 ay süreli veri ele alınmıştır. İncelenen paylaşımlar belirlenen kategoriler altında gruplandırılmıştır. Ayrıca sosyal medya paylaşımlarının içeriği ve sosyal medya kullanımlarının aktiflik düzeyi de incelenmiştir. Araştırmanın sonucunda tanıtıma yönelik paylaşımların diğer kategorilerden fazla olduğu görülmüştür. Bu da Twitter'ın üniversitelerce genelde pazarlama ve markalama için kullanıldığını ortaya çıkarmaktadır. Ayrıca üniversitelerin %40'ının Twitter'ı aktif bir biçimde kullandıkları sonucuna ulaşılmıştır.

**Anahtar kelimeler:** *Üniversiteler, Pazarlama, Sosyal Medya, Twitter.*

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## **1. INTRODUCTION**

For a very long time universities were operating their actions in a supply-side market, having limited and usually one way communication efforts and had offerings to students who could meet their prescribed entry criterias (Alexa, et al., 2012:1).

Technological instruments have developed by recent years and cause great change in the concerns of companies from traditional to technological ways. As many other sectors higher education sector has also affected from this change (Salem, 2020:192). And it forced them to rethink their marketing efforts. This change also caused many challenges for universities. There is a great pressure on them to *“provide high quality education, being a well-established university, having high enrollment numbers, improve their competitive position, having well-designed academic programs, and having a strong financial position”* (Çetin, 2004:57-58). They have transformed themselves into market oriented institutions and started to apply corporate-like branding techniques (Williams&Omar, 2013).

Universities have started to realize social media and it's potential power whenever they are using it as an instrument of their marketing facilities (Ashley and Tuten, 2015:16) and there are many different purposes for having social media accounts as branding tools (Kittle and Ciba, 1999; Rolfe, 2003); communicating with current students (Salomon, 2013); and to support education facilities (Moran et al., 2011; Salomon, 2013).

One of the mostly used social media platform is Twitter by individuals and organisations (Culnan et. al, 2010:245). Twitter is a real time network that allows users for sharing information by public or private messages. (Watars& Jamal, 2011:321). Twitter with a succinct communication method and widespread usage has become a useful vehicle for educational institutions (Salem, 2020:193). By 2013 universities in US and UK have a Twitter account. And by 2009 universities in Turkey have a Twitter account. There is serious need to analyse the usage of social media by universities and the aim of this study is to explore the usage of Twitter by universities in Turkey.

## **2. SOCIAL MEDIA AND MARKETING**

Social media is a platform which combines Web 2.0 technology with a content generated by the user (Kaplan and Haenlein, 2010:62). Social media is an important way for brands by including online channels for sharing and participating a huge amount of activities (Ashley and Tuten, 2009:94). It can be acceptable social media makes it possible to create new identities, share their content, meet other people or join new groups (Kietzmann et al. 2011:243-247). It can be said that the main characteristics of all social media applications is 'mass socialization' because there are collective actions instead of individual users (Shirky, 2008).

It can be said that social media is a hybrid element of the promotion mix because companies communicate with their customers and also customers communicate with each other by using social media. These platforms have transformed the passive roles of consumers into interactive form where consumers are simultaneously the initiators and recipients of information exchanges. And this communication which is between consumers is outside companies' direct control in the means of content, timing, and frequency. But managers have to learn how to shape this consumer interaction in the frame of companies' goals. They can achieve this by using different social media platforms (Magold&Faulds, 2009:357).

For many marketing activities social media can be seen as an instrument. Some of these activities are customer service, customer relationship management, marketing research, lead generation, and branding (Ashley, Tuten, 2015:15). In the 21st century there is a huge amount of internet-based messages transmitted through this media. And these messages have become the main factor affecting consumer behavior (Mangold&Faulds, 2009:358).

## **3. SOCIAL MEDIA IN HIGHER EDUCATION**

In recent years the competition for higher education has been strengthened by the increasing number of universities inside especially foundation universities and also by foreign universities because of online environment (Makrydakakis:22, Digital Darwinism: Digital transformation, marketing and public higher in Greece) and also high expectations of current and potential students (Alexa et al., 2012:3).

These changes caused universities to have many challenges in their facilities. There is a great pressure on them about being a well-established university, having high enrollment numbers, improve their competitive position, having well-designed academic programs, and having a strong financial position (Çetin, 2004:57-58). And also all these factors have begun to force the administrators of universities behave like a business and develop market oriented strategies (Alexa, et al., 2018:1). Paralel to this, increasing levels of public scrutiny make it compulsory to impose marketing techniques for versatile advantages for their universities (Çetin, 2004:58). And the process of managing their images became an important issue for both researchers and administrators (Hayes, 1993:424).

Higher education institutions need effective marketing strategies to define their audience, defining their needs correctly and having an interactive communication with them (Laurer, as cited in Alexa, et al., 2012). The audience of higher education institutions are: students, their parents, university staff, donors, financial supporters, and public. Also there is a need to classify the students as existing students, alumni, students who are graduated from high-schools, and international students to achieve their aims. Because all of them have different needs and expectations (Alexa, et al., 2012:2).

Marketing plays a very important role for universities to succeed in changing environment as any other organizations (Alexa, et al., 2012:2). Universities are beginning to take part in social media and realizing it's advantages when they are using it as a part of their marketing facilities (Reuben, 2008:1).

Social media may serve as an instrument for many marketing activities (Ashley and Tuten, 2015:16) and universities have social media accounts for different purposes as branding tools (Kittle and Ciba, 1999); communicating with their students (2012; Salomon, 2013); and to support education facilities (Salomon, 2013; Moran et al., 2011;).

Examples of social media instruments are Facebook, Twitter, YouTube, LinkedIn, Instagram, and Pinterest. The popularity of Instagram and Snapchat is increased because those are predominantly image-based, because the dominant visual form of the 2010s' is social media image (Hochman, 2014:1).

Based on the importance of social media use in higher education there are some evaluations for this usage made by different organizations. One of them is a rating created by uniRank<sup>1</sup>. The aim of this ranking is to provide a popularity index for each university in different social media platforms based on the total number of followers. Ranking does not include evaluation of universities, program quality education, and levels of academic services. According to 2021 Twitter University Ranking for the top 200 higher education institutions on Twitter (<https://www.4icu.org/top-universities-twitter/> access: 14.05.2022), six state universities which are included in this study, are in the list.

Most universities in UK and US have started to have a Twitter profile by 2013 (Parr, 2014) but most of these universities did not have an Instagram profile by 2016 (Stuart et al., 2017). In Turkey universities had a Twitter account by 2009.

Also, one of the mostly preferred social media tool by organisations is Twitter (twitter.com) (Culnan et al, 2010:245). Twitter is an online social network platform which enables users to send short messages with 280 characters which are called tweets. Twitter currently ranks as one of the mostly preferred social networks worldwide based on active users according to recent social media industry figures. (<https://www.statista.com/topics/737/twitter/#dossierKeyfigures>).

According to social media data Twitter usage ratio is becoming higher for live-tweet happenings -during events- e.g.sports events. These tweets have become a popular way for consumers to communicate online with other consumers and by this way they share their ideas or comments. The importance of using Twitter in politics have been also increasing. Many elected representatives, governments, and government bodies have official Twitter accounts and use it for making announcements and engage with their audience (<https://www.statista.com/topics/737/twitter/#dossierKeyfigures>). Live-tweeting posts are also useful for universities, they use Twitter for posting tweets from a live event like sport facilities, university games, etc. (Bélanger, et al., 2014:23).

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<sup>1</sup> uniRank™ is the leading international higher education directory and search engine featuring reviews and rankings of over 14,000 officially recognized Universities and Colleges in 200 countries (<https://www.4icu.org/about/>, access: 14.05.2022).

Daily active users of Twitter is 217 million (Twitter, 2022). The first three leading countries are the USA, Japan, and India and users' numbers are 77,75 million, 58,2 million, and 24,45 million, respectively. And in Turkey daily active users are 16,25 million. The distribution of Twitter users worldwide by age group is 6,6% between ages 13-17; 17,1% between ages 18-24; 38,5% between ages 25-34 (by the date 21/02/2022). User numbers for Twitter is increasing and the mostly using group is between ages 18-24 and 25-34. (<https://www.omnicoreagency.com/twitter-statistics/>). The main target of higher education institutions –university students- are in this group.

By social media, companies can reach global accesibility and by this way they can use it for institutional branding (Constantinides&Zinck Stagno, 2011). According to the study of Conole and Alevizou (2010) Twitter is generally used for sharing opinion, sharing information, personal promotion, public relations, and marketing (broadcasting); sharing ideas, information and commentary, opinion sharing about events; backchannels for conferences or events; crowd- sourcing of news and evidence from the ground and for researching and gathering information (Which Image Types do Universities Tweet?, Stuart, [https://wlv.openrepository.com/bitstream/handle/2436/622500/Stuart\\_et\\_al\\_Which\\_image\\_types\\_do\\_universities\\_tweet.pdf?sequence=3&isAllowed=y](https://wlv.openrepository.com/bitstream/handle/2436/622500/Stuart_et_al_Which_image_types_do_universities_tweet.pdf?sequence=3&isAllowed=y)).

Over recent years having social media profiles became a big importance for universities because their main audience-students "*know nothing other than a life with the internet*" (Selwyn, 2012:2), and therefore it can be said that participation in social media is an obligation now for communicating with their audience and having a visual identity (Peranginangin and Alamsyah, 2015). Bélanger et al. (2014) found that universities are three times more active on Twitter than Facebook with a sample of all Canadian universities. And according to their Twitter usage, 36% of them are very active. One of the reasons for the usage of Twitter more than Facebook is Twitter posts are limited to 280 characters, which is very useful for live feeds. For example, one university tweeted "*Getting ready for XYZ conversations, follow along with [#event name]*" (Bélanger et al., 2014:23). The other factor for more tweets is the ease of communicating with universities for different user groups. On Twitter the user can communicate by adding @UniversityTwitterAccount to her/his post but on Facebook she/he has to visit university's Facebook page.

Bélanger et al. (2014) analysed marketing strategies of all Canadian universities which are applied on social media as the aspects of institutional branding, recruitment of new students, and communicating with students. The target sample involves the total population of Canadian university-status institutions. They categorised twitter data created by universities into 6 groups as conversations, faculty and staff, campus related, events related, students related, and retweets, and also analysed social media strategies implemented by Canadian universities. They also found that the ratio of universities that are very active on social media is 30% and also content of their posts are of good quality, by this way they encourage a social interaction with their audience. Voss and Kumar (2013) found a solution in parallel with Bélanger as universities do not use Twitter effectively to communicate with their audience.

With a survey of 224 community colleges in the USA, Davis III et al. (2012) found that Twitter was used 'to inform students about upcoming events and activities, athletic games and competitions, deadlines, reminders, general college announcements, school closings due to inclement weather or other reasons, alerts, and emergencies', and that it was used as a one-way communication tool. Marketing, branding, and recruitment was the second most popular use. Similarly, Kimmons et al. (2016) categorised the tweets into two groups as informational and action tweets. Action tweets were defined as tweets those called upon the follower to respond in defined way (e.g. read, retweet, follow, join, etc.) and the others are defined as informational tweets. Totaly 5,7 million tweets from 2411 universities were analysed and 87,8% of those were informational tweets and 12,2% were action tweets. And 89,9% of those tweets are monologic and the others are dialogic.

Reuben (2008) applied a survey to 148 colleges and universities in the United States, Canada, Australia and New Zealand, and the study reveals that the institutions that use Twitter, 50 percent of them say it is updated by their marketing/communications/ and public relations office, with 50 percent reporting that they use it to communicate with current students, and the other 50 percent to target information at alumni. Others have advocated that Twitter can be an invaluable tool during emergency situations in academic institutions (Swartzfager, 2007). (Which Image Types do Universities Tweet?, Stuart, <https://wlv.openrepository.com/bitstream/handle/2436/622500/>)

Stuart\_et\_al\_Which\_image\_types\_do\_universities\_tweet.pdf?sequence=3&isAllowed=y). However, a research by Linvill et al. (2012) covering a sample of 133 US universities and colleges revealed that 89% of Twitter posts were directed towards the general public rather than current students, the ratio of this for directed to prospective students is 5% and 6% for current students (Linvill et al., 2012:637).

Peruta and Shields (2018) analysed 5932 posts from Facebook accounts of 66 universities in USA and grouped the posts. Results show that some content topics significantly increase engagement such as athletics. And another factor that increases engagement is to include user generated content. Generally saying the study provides strategies about how to improve interactivity, to better present their offerings, and increase the accessibility of their posts.

Alexa et al., (2012) were conducted a survey on 111 universities in Romania to investigate using of strategies for online and social media applied by universities in Romania. They found that public universities invest more in their social media facilities than private universities but the ratio of public universities using social media is only 18%. An unexpected result is that 12 private universities do not have a web site.

Palmer (2013) analysed the usage of Twitter by universities in Australia with 2-year Twitter data that characterise the engagement with Twitter by Australian universities, and they found widely varying levels of activity.

Veletsianos et al. (2017), by analysing all universities in Canada investigates these universities are using Twitter to share information and presenting positive dimensions of university life.

Yolcu (2013) analysed tweets of ten universities in Turkey according to their subjects, tools, and the engagement of users to these tweets. The study of Çakaröz (2018) reveals that there is a positive correlation between the social media effectiveness level and the number of university students.

Okmeydan (2020) analysed Facebook and Twitter accounts of four universities in Turkey according to how they use social media and their aims of using social media. The result of their study is interaction and relationship building of social media is not totally understood by universities.

Another study reveals that the universities in Turkey make posts mainly for sharing information and promotion. On the other hand, the number of academic posts is limited is another result for this study (Yücel ve Yücel, 2022).

Akyazı (2018) analysed YouTube, Instagram, and Twitter and found that the universities make informative posts but couldn't fully manage the relevant process about social media.

According to the relevant literature universities are using social media generally for sharing information and in a monologic way (Davis III, et al., 2012; Reuben, 2008; Kimmons et al., 2016; Veletsianos et al., 2017; Yücel&Yücel. 2022; Akyazı, 2018), and they do not use social media very active and effectively (Belangér, 2014; Voss&Kumar, 2013, Peruta and Shields,2018; Palmer, 2013; Okmeydan, 2020; Akyazı, 2018), and there may be some problems with defining the audience (Linvill, et al., 2012).

The research objectives of this paper:

- What are the categories of Twitter posts made by Turkish universities?
- What is the level of activeness of Turkish universities according to their social media usage?
- What are general characteristics of tweets of Turkish universities?

#### **4.METHODOLOGY**

There are 203 universities (129 state universities and 74 foundation universities) in Turkey by 2021 (<https://www.yok.gov.tr/universiteler/universitelerimiz>). Forty universities were selected (half of them are state and the others are foundation) for this study. These universities were taken from the list of University Ranking For

Academic Performance Research Laboratory (URAP)<sup>2</sup>. For sampling 2019-2020 ranking list was used. By using the official internet web sites of universities the official Twitter account of universities were identified. By using Ncapture programme (QSR International), Twitter data for each university were captured including the period of 6 months beginning of July 2021 to the end of December 2021 and contains totally 11,605 tweets. This time period contains both a full semester and preference term of universities in Turkey<sup>3</sup>. The Nvivo 11 programme was used to analyse captured Twitter data.

At first tweets were categorized under defined topics. Then their social media usage was measured according to their activity. And finally the qualitative data was analysed to disclose the strategies used by Turkish universities.

The type of conversations was analysed according to defined topics and four categories were created, these are – academic information, campus news, promotion of the university, and social tweets. For this categorization the studies made by Bélanger, et al. (2014) and Veletsianos, et al. (2017) were used but modified for Turkish universities. This modification was made after a pilot study which includes 3,200 tweets of 10 universities. For the classification of tweets all tweets were read one by one. To analyse social media usage and strategies of universities in Turkey qualitative data was used.

Defined categories are as follows:

Academic tweets: All tweets those are related to academic life as announcements about the academic process (e.g. academic calendar, exam dates), news about academic facilities (e.g. congress, conference, seminar, academic ceremony, academic personnel's studies), other announcements and information about academic facilities (e.g. academic protocols, internship, career planning).

Campus news: Informational tweets about upcoming events and activities (sports activities, social and cultural activities), educational activities for public and other organizations, reminders, deadlines, general announcements, school closings because of weather or other reasons, alerts, and emergencies.

Promotional: Tweets for promoting the university as; presentation of university, facilities and departments (e.g. videos, photographs, participation in a fair), successes of university staff and students in academic, sports and cultural area, press releases about university, messages to current and prospective students (good luck messages, best wishes messages), news about graduated students, founding anniversary celebrations, tweets about university broadcasting.

Social tweets: Messages about national and global special days (e.g. festivals, World Cancer Day, World Autism Awareness Day), tweets about important events (e.g. birthday/day of death of famous people, terrorist attacks), condolence messages, hashtags to support well known events, social awareness facilities of students, social awareness messages (e.g. messages about Covid 19).

## **5. ANALYSIS AND FINDINGS**

Twitter data collected from forty universities' Twitter accounts firstly analysed according to basic statistics as number of tweets, followers, and following both for state and foundation universities.

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<sup>2</sup> A laboratory which is founded by Middle East Technical University for devaluating scientific methods to evaluate the success of universities both in Turkey and in the other countries.

<sup>3</sup> In Turkey to register a university, students enter an exam and then according to this exam's results they make a choice list of universities they would like to prefer.

**Table 1: Basic account statistics for state universities**

University	Number of tweets	Number of followers	Number of following
Hacettepe University	108	45,492	58
Middle East Technical University	131	167,425	4
İstanbul Technical University	511	82,448	187
İstanbul University	1023	120,659	164
Ankara University	688	283,196	43
Gazi University	425	1163	2
Ege University	13	126,172	116
İstanbul University -Cerrahpaşa	94	1183	1028
Yıldız Technical University	433	53,216	62
Boğaziçi University	192	129,844	77
Gebze Technical University	219	8401	1
Marmara University	262	64,636	277
Atatürk University	688	283,196	43
Dokuz Eylül University	719	25,529	96
Erciyes University	211	27,411	17
Selçuk University	541	40,734	28
Çukurova University	271	7354	2
Karadeniz Technical University	119	12,812	65
Fırat University	359	13,983	6
Akdeniz University	326	64,500	147

Table 1 and Table 2 show range of basic account statistics during the time of data collection. 11,605 tweets over the span of six months were analysed.

**Table 2: Basic account statistics for foundation universities**

University	Number of tweets	Number of followers	Number of following
Koç University	162	43,562	41
Sabancı University	95	37,724	197
İhsan Doğramacı Bilkent University	24	80,270	25
Çankaya University	448	3342	2
Bezm-î Âlem Vakıf University	157	6421	69
Acıbadem Mehmet Ali Aydınlar University	166	5294	18
Başkent University	73	17,075	45
TOBB University of Economics&Technology	146	16,036	43
Atılım University	30	10,721	33
Yeditepe University	189	31,209	94
Özyeğin University	54	20,896	132
İstanbul Medipol University	268	27,428	16
Bahçeşehir University	210	55,879	26
İstanbul Arel University	103	17,436	97

Yaşar University	243	4812	234
İstanbul Bilgi University	316	71,823	321
Kadir Has University	496	17,803	81
İzmir Ekonomi University	500	11,377	18
Üsküdar University	362	3067	1574
Hasan Kalyoncu University	230	15,079	18

The average number of tweets for state universities is higher than foundation universities. Average number of followers is higher for state universities but this may be related with the higher student numbers of these universities. Average number of tweets is higher for state universities, too.

**Table 3: Data collected from Twitter**

Tweet Type	State Universities		Foundation Universities	
	Total number of tweets	Relatives (%) for total tweets	Total number of tweets	Percentages (%) for total tweets
Academic	1672	22	1018	24
Campus news	2272	30	601	14
Promotional	2437	32	2019	47
Social	1180	16	634	15
Total	7561	100	4272	100

Table 3 reveals general information about distribution of tweets according to university type and tweet categories. The tweets’ percentage for promotional and campus news is higher than others for state universities. But for foundation universities percentage of promotional tweets is noticeably higher than others. Additionally, three groups of tweets; academic, campus news, and social are generally contain campus news feed conversations, there a few student-university interaction tweets in promotional groups. One the other hand, in the survey of Linvill, McGee, and Hicks (2012) 89% of tweets of 133 US universities are directed to general audiences, and 6% towards current students, and only 5% directed to prospective students but according to this study 52% of tweets is towards current students for state universities and 38% of tweets is towards current students for foundation universities. And 32% of tweets can be said to be towards prospective students for state universities and 47% of tweets can be said to be towards prospective students for foundation universities.

**Table 4: Descriptive statistics for state universities’ social media institutional activities**

Tweet type	Minimum	Maximum	Mean	Std. Deviation
Academic	1	311	83,6	74,35
Campus news	5	405	113,6	126,03
Promotional	2	457	121,85	113,88
Social	5	228	59	49,98

**Table 5: Descriptive statistics for foundation universities’ social media institutional activities**

	Minimum	Maximum	Mean	Std. Deviation
Academic	1	205	50,9	50,15
Campus news	2	98	30,05	30,19
Promotional	11	244	100,95	67,88
Social	8	107	31,7	27,63



Table 4 and Table 5 refers to the descriptive statistics of the twitter data. Minimum means the minimum number of tweets in that category and maximum means the maximum number. For example, the lowest tweet number is 1 for academic tweets for a state university and the highest tweet number is 311 for this state university for academic tweets. Mean provides the average number of tweets for the group. The highest average number of tweet groups for both state and foundation universities is promotional tweets and for state universities the lowest is social tweets and for foundation universities lowest is campus news. Standard deviation refers the dispersion of tweets for that group in relation to the mean. We can say both state and foundation universities have a more homogeneous number of tweets for social tweets. The largest standard deviations are promotional tweets for both two university groups. It can be said that while some universities are using Twitter actively for promoting themselves while the others are not.

**Table 6: Interactivity for state and foundation universities**

		State Universities(%)	Foundation Universities (%)
Academic tweets	Active	30	40
	Average	5	0
	Below average	65	60
Campus news	Active	25	30
	Average	5	5
	Below average	70	65
Promotional tweets	Active	35	40
	Average	0	10
	Below average	65	50
Social tweets	Active	45	20
	Average	0	15
	Below average	55	65

According to their “social media usage, universities can be divided into three levels for their activity – active, average, below average”. Active status means having posts above mean, below status means having posts below mean, and average status means having posts near to mean. (Bélanger, et al., 2014:21). For both state and foundation universities 40% of universities are qualified for active category. For state universities the ratio of active category is highest for social tweets (40%), and for foundation universities the ratio of active category is highest for academic tweets and promotional tweets.

**6.SOCIAL MEDIA CONVERSATIONS**

Social media creates a medium where participants can share their ideas interactively with many groups. This situation is valid for universities but there are some questions we need to scrutinize about these conversations as “What kind of tweets are being shared?”, “Which tweets have higher like ratios?”, “What kind of posts receive the most attention?”.

Although the number of followers, likes, tweets, and other quantitative values are important another important factor to evaluate tweets of universities is concept. Sharing what their audience – especially students-want to hear is crucial for universities. And also having a social media strategy consistent with their branding strategy is critically important. This strategy should mainly focus on the areas that universities can be compatible and also the areas where they are the best (Bélanger, et al., 2014:25).

When we look the tweet range of the first state university in our list, the highest ratio of tweet group is promotional tweets (65%), the second one is academic tweets (16%), and the third one is social tweets (14%), and campus news tweets group (6%) is the last. The highest mean value of group likes is social tweets, the second is campus news, promotional and academic tweets are third and fourth respectively. For the the first foundation university in our list, the highest ratio of tweet group is again promotional tweets (62%), academic (15%), and

campus news (15%) tweets are second, social tweets (7%) are the last. On the other hand, the highest mean value of group likes is promotional tweets, the second one is social tweets, campus news and academic tweets are third and fourth respectively. For both two universities tweets about academic prizes for university, staff, and students have an important share in promotional tweets group.

When we make this evaluation for analysed 20 state universities; the top two groups that have highest ratio of tweets are promotional and campus news tweets, for foundation universities these are promotional and academic tweets respectively.

As mentioned before, the content of tweets is as important as the number of tweets. For example, a tweet from a state university "X university campus is even more beautiful when it's snowing" which includes a snowy photo of campus has the highest like number (1833) where a tweet about presentation days has only 7 likes. There are many similar examples of tweets included images that captured beauty of the campus and those have high likes, too.

An example from a foundation university that has the highest ratio of sharing in promotional category, a tweet that share the information of an important prize in medicine of an academic staff has the highest (1970) likes (other academic prizes generally have higher likes according to the average), a tweet about patent competition announcement for students doesn't have any likes or a tweet about an academic certificate program has only one like.

Another different and interesting example is from a state university that shares different poems with beautiful photographs. Usually these photographs are coming from students. These tweets begin with "Good morning X University Family", "Have a good weekend X University Family". Same university has also a tweet series as "What happened in our university last week?" a summary of the events happened previous week. And an entertaining tweet from this university is a crossword puzzle that has many likes and comments for the answer. Also a tweet includes a question as "When did our university produce graduates firstly?" after a time and many answers, a tweet that included the statistics for the answers and the correct answer was shared. Some similar questions were shared and many of them gets high interaction. This university has a different strategy for social media.

An example for a dialogic tweet is from a state university as "We asked new graduated students to describe our university with 3 words. What about you? What will you say to describe our university with 3 words?". There are some commends for this tweet and also questions to university as commend but there aren't any answers for these questions. When we remember the issue that by marketing activities in social media although universities can not totally control their conversations but they can dissiminate this negative point by promoting positive feedback and replying and finding a solution for the problem, and they are losing an opportunity. Because it helps to building a strong relationship and trust between the universities and their audience (Voss&Kumar, 2013).

Tweets for prospective students and students who are newly enrolled in university are important for university image. An example from a state university is "We are happy to be with you. You have provided force our word to the world". This tweet has many likes.

The style of the tweets has mostly sincere style, for example a tweet from a state university is "We have said that this wouldn't be uncompleted 😊" or another tweet from a state university "Tag your friend whom you want to accompany you with drinking coffee#WorldCoffeeDay" with a coffee photo. These kind of tweets have many likes.

Generally saying universities trying to say what the main target –students- want to hear but they also be aware of their success areas and try to send posts according to these areas effectively (Bélanger et al., 2014:25). Although universities are academic organisations, sometimes academic tweets do not take high attention instead a photo of campus may take high attention. Nevertheless, universities should continue to make academic posts but try to learn which other posts types may get great attention. There is need future studies for detailed learning about this.

## **7.CONCLUSION**

There are many reasons and different ways of using social media by universities. One important reason is branding their image. Especially in the perspective of their important audience –students- a generation who is always connected, they need to be connected and use effective social media strategies (Bélanger, 2014:26). This research reported a large-scale analysis about the usage of Twitter by Turkish universities as a marketing tool by using Twitter data from the official university accounts during a period of six months. Qualitative data was used to categorise the posts in four groups. The ratio of promotional tweets is higher when compared to other groups while social tweets receive more attention.

So it can be said that Twitter accounts of universities were mostly used for marketing and branding. But for seeing if this usage is effective or not we have to analyse the concept of these shares (promotional tweets). There may be more studies in the future to analyse the concept of promotional tweets, subtitles of these tweets, which of them is getting more attention, and etc.

Also there may be future studies those bring a better understanding of the factors that lead the most engaging interactions on social media (Veletsianos, et al., 2017:16). For example, why social tweets receive more attention can be analysed in future studies.

When posts of state and foundation universities are compared according to tweet types, it is seen that both of them are mainly sending promotional posts that include presentation of universities, successes of universities, and messages to students. The other category that state universities mostly share posts is campus news include mainly informational tweets about upcoming events and activities, deadlines, reminders, general announcements, and etc. For foundation universities academic posts are secondly most shared posts.

Another result is according to their social media usage 40% of both state and foundation universities are qualified for active category. For state universities the ratio of active category is highest for social tweets (45%), and for foundation universities the ratio of active category is highest for academic tweets and promotional tweets (40%).

When the content of Tweets was analysed, it was seen that generally a sincere style was used when addressing students. Some universities have different posts, for example posts include poems, puzzles, etc. And some examples include making students a part of promotion.

We can say that social media platforms are the most important channels for universities for their promotion campaigns and communicate with their audience. The importance of this fact becomes even more evident when we consider that the most important target audience of universities is students.

Studies involving social media applications of universities are very important in terms of revealing how social media is currently used by universities and how it can be used more effectively, but furthermore, examining the background of these applications (Is there a separate department at universities that does this job, is this department have expertise on this subject, is there enough budget allocated for these studies, etc.) and investigating how these practices are evaluated from the student side is also important in terms of bringing a holistic approach to the subject.

This study covers forty Turkish universities and this number may be largely enough but covering only one social media platform and not covering student interaction aspect are the limits of this survey. However, this study provides some useful insights for the usage of social media for Turkish universities and for future research.

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