

THE EFFECTS OF SOCIAL MEDIA AND GAMIFICATION ON
PROSPECTIVE STUDENTS' UNIVERSITY CHOICE PERCEPTION

Case Study: “The Game of Your Life” by Özyeğin University

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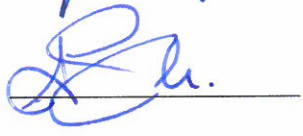
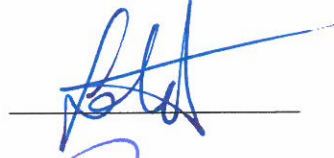
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Abstract

This study is about the effect of online social media and gamification on prospective student’s university choice perceptions. University choice perception is very longstanding topic on research area. There are numerous study about university choice but these studies not include newly discussed topics such as online social media and gamification.

In this study, our model based on Selin *et al.* [1] which is an extensive and up-to-date local study about university choice, but the difference is we examined that “Can we add ‘online social media’ as a new information source factor to the model?”, and ‘gamification’ as a moderator factor. In this survey-driven study, we prepare a questionnaire based on Selin *et al.* [1] and we applied these online survey to Özyeğin University’s new students who registered the university at 2012 because, in 2012, Özyeğin University published a Facebook Application “The Game of Your Life” which is a good example of gamification done by a university in Turkey.

Our survey reached 304 students from 1264 students who registered the university at 2012. There is 41 students (17 percent of all participants) who played Özyeğin University’s “The Game of Your Life” game.

SOSYAL MEDYANIN VE OYUNLAŖTIRMANIN ADAY ÖĐRENCİLERİN ÜNİVERSİTE SEÇİMİNDEKİ ETKİSİ

Vaka Çalışması: Özyeğın Üniversitesi'nden "Hayatının Oyunu"

Özet

Bu çalışma çevrimiçi sosyal ağların ve oyunlaştırma faktörünün Türkiye’deki aday öğrencilerin üniversite seçimine etkisini irdelemektedir. Üniversite tercihi süreci araştırma konusu olarak uzun bir geçmişe sahiptir. Üniversite tercihleri ile ilgili çok sayıda çalışma bulunmaktadır ancak bu çalışmaların çok büyük bölümü son yıllarda yaygınlaşan çevrimiçi sosyal ağları ve oyunlaştırma kavramlarını içermemektedir. Bu çalışmada önerdiğimiz model, son yıllarda Türkiye’de üniversite tercihleri ile ilgili yapılmış Selin Küçükkancabaş’ın “Türkiye’deki Öğrencilerin Üniversite Seçim Kararlarını Etkileyen Faktörlerin Belirlenmesi” başlıklı doktora tezi çalışmasını baz almıştır ancak Küçükkancabaş’ın çalışmasından farklı olarak “Çevrimiçi sosyal ağlar üniversite tercihlerinde ‘Bilgi Kaynağı’ olarak bir faktör olabilir mi?” ve “Oyunlaştırma üniversite tercihlerinde ‘Üniversite Karakteristiğı’ ve ‘Bilgi Kaynağı’ faktörlerine etkili moderatör faktör olabilir mi?” soruları irdelenmiştir.

Bu anket uygulamalı çalışmada, Özyeğın Üniversitesi’nin uyguladığı “Hayatının Oyunu” isimli oyunlaştırma örneğı üzerine vaka çalışması yapılmış ve önerilen model baz alınarak 16 soruluk bir anket hazırlanmıştır. Anket, Özyeğın Üniversitesi oyunu 2012 yılı tercih dönemi için hazırlayıp yayımladığından, Özyeğın Üniversitesi’nin 2012 girişlerine çevrimiçi olarak gönderilmiştir. Anter Özyeğın Üniversitesi’nin 2012 girişli 1264 öğrencisinden 304’ü tarafından doldurulmuştur. Anketi dolduran öğrencilerden 41 tanesinin (tüm katılımcıların %17’si) “Hayatının Oyunu” isimli oyun uygulamasını kullandığı tespit edilmiştir.

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List of Abbreviations

OZU	Özyeğin University
SocialM	Social Media Factor
SocialE	Social Environment Factor
OSYM	Öğrenci Seçme ve Yerleştirme Sistemi (Assessment Selection and Placement Center)
YOK	Yüksek Öğrenim Kurumu (Higher Education Institution)
LYS	Lisans Yerleştirme Sınavı (Undergraduate Placement Exam)
WOM	Word of Mouth
WWW	World Wide Web
Q&A	Questions and Answers
CRM	Customer Relationship Management
SMS	Short Message Service
YGS	Yüksek Öğrenime Giriş Sınavı (Higher Education Entrance Exam)
CV	Curriculum Viate
RSS	Rich Site Summary

Chapter 1

Introduction

In recent years, university choice process became a more serious and complicated for both students and parents. There is a centralized university placement system in Turkey and students must enter a university entrance exam to study in university. After the university entrance exam, students make a preference list which includes 24 universities. In the end, OSYM (Student Selection and Placement Center) place (or don't place) each students to a university according to their university entrance exam score. Therefore, students generally choose universities in their preference list according to their exam scores. They check over universities and ask their influencers such as their family, friends, and teachers when they prepare their preference list. On the other hand, there are about 200 private and state universities in different cities in Turkey and increase every passing year. Each university has different characteristics and also each student has different expectations from university life. So, students should check over all universities both advantages and disadvantages due to their expectations for choosing ideal university.

In addition, education is a huge market in Turkey. There are thousands of training centers, private schools, consultancy office, etc. Parents spend too much money and students spend a lot of time for common aim; good profession and business. In accordance with this purpose, good university and department is essential. Despite all, most of university students are not happy with their university or department because of wrong placement choice. Not only students, but also it's an important problem for universities to have unhappy and unsuccessful students. Universities want successful students to choose their departments and they want to stuff with their quota with as possible as successful students. In accordance with this purpose, all universities have PR (Public Relations) offices and marketing studies to reach students.

Over the last five years, depending upon rising of both online social networks and number of universities, studies about relationship between online social networks and university choice process become more important and popular. It's easier to reach information about universities for students. Students (and also parents) always online and use online social networks for different purposes like brand or product research. Under these circumstances, it's important to understand "online students" behaviour when they make decision for university choice.

This study is about the effect of online social media and gamification on prospective student's university choice perceptions. University choice perception is very longstanding topic on research area. There are numerous study about university choice but these studies not include newly discussed topics such as online social media and gamification.

In this study, our model based on Selin et al. [1] which is an extensive and up-to-date local study about university choice, but the difference is we examined that "Can we add 'online social media' as a new information source factor to the model?", and 'gamification' as a moderator factor. In this survey-driven study, we prepare a questionnaire based on Selin et al.[1] and we applied these online survey to Özyeğin University's new students who registered the university at 2012 because, in 2012, Özyeğin University published a Facebook Application "The Game of Your Life" which is a good example of gamification done by a university in Turkey.

Our survey reached 304 students from 1264 students who registered the university at 2012. There is 41 students (17 percent of all participants) who played Özyeğin University's "The Game of Your Life" game.

Our motivation to make this research that uninformed university choice is big problem for both students and universities. Understanding prospective students' university choice perception and its new dynamics can help to decrease effects of uninformed university choice problem.

The remainder of this study is organized as follows:

- Chapter 2 consists of information on social media, university selection perception of students and also gamification concepts from diverse promising research papers.
- Chapter 3 presents our research methodology, research model and detailed description of our case study.
- Chapter 4 presents data analysis and results of our case study.
- Chapter 5 provides conclusion of my thesis.

Chapter 2

Research Background

This chapter provides a brief literature review and AS-IS analysis of diverse important components of our study such as social media, gamification, university choice process, decision strategies, factors and so on.

2.1 University Selection Process

Higher education becomes more of an issue during the recent years in Turkey and university choice process is very important not only for students and parents, but also universities. Therefore, marketing potential of higher education increases day after day.

In 2012, 1.938.165 students took LYS (undergraduate placement exam) and 865.482 students deserved to get into university [2]. In return for approximate 2 million of prospective students, there are 188 universities in Turkey and 65 of them are foundation universities according to YOK records [3]. There is a centralized university placement system in Turkey and students must enter a university entrance exam to study in university. After the university entrance exam, students make a preference list which includes 24 universities. In the end, OSYM (Student Selection and Placement Centre) place (or don't place) each students to a university according to their university entrance exam score. Therefore, students generally choose universities in their preference list according to their exam scores. Of course, they check over universities and ask their influencers such as their family, friends, and teachers when they prepare their preference list. When students want to make right choice of university, also universities –especially foundation universities- make an effort to reach and matriculate as possible as successful students. There are a lot of academic, social, physical and cultural properties that make a university engaging than others and every single university brings their best properties to the force.

In Turkey, education is a huge market. There are thousands of training centres, private schools, consultancy office, etc. Parents spend too much money and students spend a lot of time for common aim; good profession and business. In general, every single student (or parents) spends between 3.000 - 30.000 TL for exam preparation such as training centres, books, private lessons etc. due to their budgets. If we calculate it for these 1.500.000 students, we see sizeable amount of money; 22.500.000.000 TL. In addition, universities also spend millions of TL to reach more appropriate students. Despite all, most of university students are not happy with their university or department because of wrong choice.

Metin Kozak and Yeşim Coşar made a study [4] to evaluate relationship between students' decision strategies when they make OSYS choice which is very important exam and choice for themselves, satisfaction level of their current university, disposition to suggest their current university and disposition to prefer another university in the future. They collected data of research with close ended questionnaire from students who have a right to attend a tourism education on undergraduate level according to 2007 OSYS results. Three correlation analyses for all of these purposes showed that the strongest variables are unrecoverable strategies and opportunity oriented strategies. Another correlation analysis which is taken into consideration of chosen university's specifications uncovered that quality of university education, location and life quality of city, and transportability and acquaintance level about city are directly associated with satisfaction level of chosen university, disposition to suggest their university to others and disposition to prefer another university in the future. In addition, physical properties of university doesn't have positive or negative relation with such variables.

The university selection process typically takes a number of years and involves considering many factors. The goal of Beswick's study [5] was identifying those factors that influence prospective students during university selection process. 227 first year students from three degree granting institutions in Alberta were surveyed by means of questionnaire to determine those factors considered during the university selection process. Correlations, means, analyses of variance and qualitative data provided the statistical and descriptive information for interpretation. Beswick's study found out that parents, particularly mothers, are the most influential persons reported

to affect student's university selection process. The factors which tend to be important for the University of Alberta's students were not the same with students' who attending the two smaller universities; Camrose Lutheran College and the University of Lethbridge. For University of Alberta students, reputation of the institution, reputation of the program, variety of course offered, and proximity to home are important factors in their choice. University of Lethbridge and Camrose Lutheran College students value low student/professor ratio, low student population, and reputation of institution.

In another valuable study, college choice models were developed to help meet the needs for understanding the students' college selection process. Strauss's Study [6] used three stage college selection model; stage one; predisposition, stage two; search, and stage three; choice. To examine and determine the nature of internet usage and the degree to which it is used as an information source during search and choice stages of the college selection process was the purpose of Strauss's study. Second purpose was to determine and examine the nature and use of traditional sources of information during the search and choice stages. 389 first-quarter freshman student participate in study with a questionnaire at The Ohio State University. The results show that a majority of students have access to internet and have used the internet to some degree to access information about colleges.

2.2 Social Media as Information Source

With advances in technology, more information becomes available to the public through a wide range of channels. People can reach information not only through the traditional sources, but also through the internet source in various formats. Research shows that users, especially undergraduates, frequently rely on open resources available on the Web [7], [8]. Recently, online social networks whose content is contributed by users has become more popular as information sources while reliability of information from such sources is quite a bit questionable and difficult to assess [9]. Online Social Networks are online services or platforms that create social networks or social relations between people. People can share their interests, activities, comments, photos, videos etc. and interact with other people via online social networks. In addition, people frequently shares their comments about products or services that they use via online social networks. Not only users, but also companies and corporations

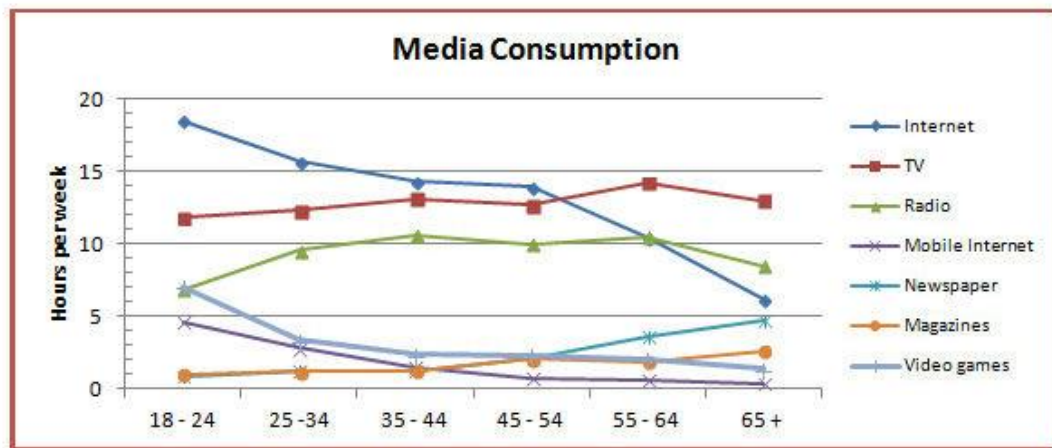
use online social networks to interact with their customers or target audience. This structure reveals a new notion which is called as social media. Social media enables people to get information from other users and communicate with companies and corporations directly.

Kim's survey study [9] was focused on what kinds of social media are used as information sources and why. Kim's study also examined that what kind of actions users take in order to evaluate the trustworthiness of information provided by social media sources. An online questionnaire with two parts was used in the study and 446 undergraduate students from a public university attended. First part on use the use and evaluation of social media sources and the second part on the user characteristics. Kim's study found that Wikipedia, social networking sites (e.g. Facebook, Twitter) and online user reviews were typically used for finding information and that Wikipedia, YouTube, Q&A sites were used in both daily life and academic/course-related information seeking contexts. The study also found out that strategies for evaluating the trustworthiness of information vary depending on sources (e.g., for Wikipedia; often check the quality/quantity of references provided, for YouTube and Q&A sites; check others' reactions and comments).

Facebook, which is the most known online social network around the world with 1 billion members [11], allows users to share comments and experiences about a product or service on product's or service's Facebook Page. And also users free to share their comment and experience about a product or service directly on their profile as almost all social network sites. By this means, people can take feedback from other users who already use (or used before) product or service which they interested in. In addition, brands also can take feedbacks from their customers or target audiences via monitoring tools or via peer-to-peer communication over the online social networks. Some brand managers are considering replacing their traditional CRM approaches in favour of ' Facebook as the new CRM ' (example; where CRM is defined as setting up a new Facebook brand profile, recruiting ' fans ' and interacting with them) [2]. Gen Y is also a proactive generation. They communicate in ways that are comfortable for them and expect that they will be provided the tools to do that. (See "Table 2.1" for how they gather information and communicate). This isn't just technology-savvy. Millennials use

technology in an unexceptional way because it is how they live. This isn't "cool", It is just "is" [3].

Table 2.1. Average hours of media consumed per week age group and media type.



In the offline world, customer's decision to buy a product or service is influenced by family, friends, and colleagues. The same situation is existing in the online world. So, individuals with online social ties can promote a buzz (online word of mouth) and create niche groups of customers with similar interest [12].

The first stage in a customer's purchase decision making process is identifying the need for a specific product or service. Although this is considered the first stage in the process, the role played by business in creating brand and product awareness begins long before customers become aware of a need. Customer needs and wants can be motivated by social networks. Normative social influence creates a social and psychological pressure on people to purchase a product or service since not adopting that product may paint them as old fashioned in their society or network of friends. However, informational social influence is a learning process achieved through observing early adopters' experiences with a special product (or service) aiming to understand the motives for acquiring it [13].

Decrease in trust of institutions and increase in trust in "someone like me" transformed the way that the customer thought about doing business – not just the processes. The customer of the twentieth century became the social customer of the twenty-first

century. They are customers who feel compelled to share information with peers they might never have met but who are “someone like them”.

Microblogs is a new phenomenon that provide a new communication platform for people to share information which they likely would not share otherwise using existing channels such as e-mail, phone, IM, or weblogs [14]. For blogs, Kolari et al. [15] defines that a user is considered active during a week if he or she posted at least one post during that week. One of the main difference between regular blogging and microblogging is based on need for an even faster communication. Shorter posts requires shorter time. The second important difference is the frequency of update. On average, a blogger may update his/her blog once every few days; but a micro blogger may post several updates in a single day [16].

Twitter is one of the most popular microblogging platforms [13]. People often create Twitter posts (tweets) as things happen in real time [14]. Twitter’s main purpose is for users to answer this question; “What’s happening?” [17]. However, in Mischaud’s study [18] of 5,767 Twitter messages, %58.1 of the messages did not answer this question. A growing number of people are using Twitter to interact with others, sometimes in extended exchanges, even though the Twitter was not designed primarily for such use. Many people used Twitter also as a RSS (Really Simple Syndication) [19] feed for gathering information interesting and useful for their work and other personal interest [14]. Based on Java et al. [16], there are 3 main categories of users on Twitter;

- Information Source: An information source is also a hub and has a large number of followers. This user may post updates on regular intervals or infrequently.
- Friends: Most relationships fall into this broad category. There are many sub-categories of friendships on Twitter.
- Information Seeker: An information seeker is a person who might post rarely, but follows other users regularly.

Collaboration is another potentially important role for person-to-person interaction via Twitter [20]. Twitter already is being used to disseminate information in institutional settings and to connect groups of people in critical situations [21].

A friend who uses Twitter to comment on his recent purchase and describes the product with passion or disappointment affects his friends more than a formal review. Plus, friends may re-tweet (i.e., repost) the comment if they trust the original author. The re-tweet may be re-tweeted again to reach larger communities. In open social networks such as Twitter, users can search for products and reach thousands of informal, and sometimes formal, reviews about these products. Customers who may not have complete information about a product or service are eager to learn from other customers.

We did focus group with random 8 high school students for a study about Twitter usage of Turkish youth in 2010 [22] and we talked about Twitter and Facebook. Their feedbacks also overlap with past studies that they use online social networks as an information source and also they use online social networks as a communication channel like SMS (Short Message Service). But strikingly, they said that they had not been used online social networks for gathering information about universities during the preparing LYS-YGS exam period.

Of course not only Facebook and Twitter used as information sources by users, but also other online social networks used as information sources too such as blogs (web logs) and online forums.

Blogs' definition is also a discussion of informational site published on the World Wide Web and consisting of discrete posts (entries) typically displayed in reverse chronological order [23]. Many blogs provide information and commentary on a particular subject. Nowadays, not only users, but also brands, corporations, foundations and institutions have also blogs for giving information about them. People like to share their experience and commentary on their own blogs. Some of bloggers who write blog posts are professional as a magazine and make money from their blogs while some of them blog voluntary. You can easily find a blog about almost all topics, brands, services, products etc. Therefore, many people already read blogs to get

information about a topic, product or service and so much so that brands or big corporations started to hold a special press conferences for bloggers.

Beside of these, online forums (internet forums) are an online discussion site where people can hold conversations in the form of posted messages about a topic. Differently from blogs or other social network platforms, main aim of forums is discussion. Someone shares an information or asks a question about a topic on forums, then users start to talk and discuss about the topic. Some users may add additional information to topic, some users may share comments about topics and some users may answer other users' posts. So, conversation goes on. Topics which are discussed on forums are generally about products (such as mobile phones, notebook, shoes, cars, etc.) or subjective titles (such as love, education, technology, etc.). On the products and customers side, researches shows that the consumers who gathered information from online discussions reported greater interest in the product topic than did those consumers who acquired information from the marketer-generated sources [24].

According to another important research, Jo Brown and his friends investigated online WOM (Word of Mouth) and its effects on online communities and individuals [25]. The study (2007) was two-staged; first stage included in-depth qualitative interviews and the second stage they made a social network analysis of a selected online community. The researchers found that three constructs which they think influence consumers' evaluation of information online context without the help of common offline social cues.

This study showed that consumers think that they are interacting with web sites, not individuals themselves while searching information online. On the other hand, significantly all the more needs to be seen about the contrasts between the social parts of information evaluation the web, and they have given some beginning headings to future research.

2.3 Gamification and Education

Other growing discussion concept which is recent and fresh in game and marketing studies circles is gamification [20]. Gamification is the use of game-like thinking and elements in places that aren't traditionally games. The use of game mechanics and dynamics like badges, levels, leader boards, actions and challenge between users can be useful for improving motivation and learning in informal and formal settings [26]. Gamification, defined as the use of game mechanics, dynamics, and frameworks to promote desired behaviours, has found its way into subjects like marketing, politics, health, with analysts predicting that it will become a multi-billion dollar industry by 2015 [27]. Gamification has come into used as a clever way promote a product or service. For example; players can earn discounts, badges, and other rewards for visiting real-world shops and “checking-in” to the mobile phone application FourSquare. Games that are designed to promote positive lifestyle changes are starting to appear as well. In addition, gamification is readily applicable to increasing engagement on sites built on social network services. Users receive points and/or badges for performing a variety of actions, including spreading links to questions and answers via Facebook and Twitter. DevHub, increased the number of users who completed their online tasks from 10% to 80% after adding gamification elements [14]. Some common techniques have been applied to gamification projects, such as: achievements, badges, levels, leader boards, progress bars, activity feeds, avatars, real-time feedback, virtual currency, gifting, challenges and quests, trophy case and embedding small mini games within other activities [19].

Huotari's study [28] has defined gamification from the perspective of service marketing as a process of enhancing a service with affordances for gameful experiences in order to support user's overall value creation. This definition of gamification into an existing body of knowledge of service marketing and its concepts like 'service systems', 'service package' and 'value-in-use' will help future research to examine how gamification can contribute marketing science. This study also provides the gamification research with proven theoretical models to build upon. The proposed definition is agnostic regarding the nature of the core service that is being gamified. From this point of view, it challenges the view that gamification can only happen when game-like elements are used in non-gaming contexts.

İbrahim Yıldırım and Servet Demir did a qualitative study about Gamification and Education in 2014. The purpose of Yıldırım's Study [29] is to examine the research problem that "What is Gamification?" and "How can the gamification be used in education?". They proposed an educational gamification example as a result of their study on the subject. They pointed that game elements in non-game settings (or Gamification) creates an opportunity for schools to solve some problems. Gamification applications increase students' motivation and motivated students' have more academic success. To clarify educational gamification, they created a gamification application that gamifies a process of the lesson with game mechanics such as point, badge, leader boards, level and xp. For example; a student who helps his/her friends can gain "helpful" badge. On the other hand, lead process to success teachers should manage the gamified process successfully. A computer software can be developed to help teachers gamify a lesson.

Buncball which is leading company of online gamification solutions prepared a white paper about use of game dynamic to influence behaviour [30]. As mentioned in literature, gamification applies game dynamics and mechanics to non-game activities. In a business case, gamification is integrating game dynamics and mechanics into a business service, content portal, website, online community or marketing campaign to improve engagement and participation. And also gamification is an important concept to solve non-business problems such as education & training (e-learning, online testing, etc.), health & wellness (smoking cessation, obesity programs, etc.), public policy & government (climate change, education reform, etc.). According to Buncball's white paper (2010), Game Dynamics are motivational experiences (i.e. reward, status, achievement, self-expression, competition, altruism) and Game Mechanics (i.e. points, levels, challenges, virtual goods and spaces, leaderboards, gifts and charity) are actions to gamify an non-game activity.

Chapter 3

Research Methodology and Model

This chapter of our study includes our research objectives, methodology and scope. Also our conceptual model on university decision process of students is presented, and developed hypothesis and survey application with questions are explained in detail.

3.1 Research Objectives and Methodology

The purpose of this study is investigating factors attributing to the university choice of Turkish prospective students. The study focused on the online social networks as information source indicators of final university choice, but also includes university characteristics as indicators of final university choice. This study was also undertaken to examine the role of gamification as a moderator variable on the relationship between university characteristics, information sources and prospective students' university choice.

The following research questions were developed to guide the study;

- What are the main factors that determinants of prospective students' university choice behavior?
- Do university characteristics (image, social environment, financial factors) have a direct relationship with prospective students' university choice?
- Do information sources (university communication efforts, social media) have a direct relationship with prospective students' university choice?
- How does gamification moderate the relationship between university characteristics and prospective students' attitude toward university?
- How does gamification moderate the relationship between information sources and prospective students' attitude toward university?

Gamification is very popular as a marketing tool in recent years all around the world. Nevertheless, especially in university marketing, there is not many successful and full-scale gamification application in Turkey. For this reason, it's very hard to do full-scale study. This study is a case study that focused on Özyeğin University's "The Game of Your Life" case. "The Game of Your Life" is a Facebook Application which includes gamification and used for Özyeğin University's promotional activity.

First of all, we did AS-IS analysis of our case study. We perform a detailed research on Özyeğin University, Özyeğin University's marketing exercises for prospective students, current gamification studies and applications, Özyeğin University's "The Game of Your Life" application and its results, studies about university selection process. Then, we developed our research model as described in Section 3.3. Our conceptual model is based on Selin Küçükkanca's model as illustrated in Figure 3.2 [1]. According to our conceptual proposed model, we developed our survey application which is explained in detail in Section 3.4.

3.2 Case Study

3.2.1 About Özyeğin University

Özyeğin University (OZU) is a brand new university in Istanbul. The foundation of Özyeğin University entailed a comprehensive study that involved more than 500 persons including businessmen, faculty members, as well as university and high school students in addition to a study entitled "Developing Sectors and Professions in Turkey and in the World".

Özyeğin University was officially founded on May 18, 2007 with the mission of contributing to social development by producing creative, original and applicable knowledge through its modern education system, its innovative structure integrated with life and its academic programs focused on the service sector.

Özyeğin University, thus, welcomed its first students on its Altunizade Campus in September 2008 and opened the doors of its Çekmeköy Campus in September 2011. Thus the university has increased the total area of its campuses to 136 thousand m². Özyeğin University also built a strong faculty with distinguished faculty members.

60% of the OzU faculty came from top 100 universities around the world, while 85% came from global top 200 universities.

In 2012, Özyeğin University produced its first cohort of graduates and launched 6 new undergraduate programs including Pilot Training, Gastronomy and Culinary Arts, Management Information Systems, International Business, Civil Engineering and Architecture in addition to its existing programs in Business Administration, Entrepreneurship, Banking and Finance, Psychology, Law, Industrial Engineering, Electrical-Electronics Engineering, Computer Science, Mechanical Engineering, Hotel Management and Air Transportation Management. Thus, the university welcomed the 2012-13 academic year with a total of 18 undergraduate programs offered by its 5 faculties and 2 schools.

3.2.2 Gamification: "The Game of Your Life"

OZU, a brand new university in Istanbul, asked for a digital campaign to attract the top students from all around the country. The university had high standards in education, but didn't have any stories to tell since there weren't any graduates yet. Reaching successful high school graduates was a real challenge, since every other university wanted them and had a major advantage of having thousands of graduates to tell their stories first hand. So, main goal of The Game of Your Life was to attract these students that are likely to choose other well-known universities. The Game of Your Life's secondary goal was to create awareness of Ozu's student oriented and open minded culture. Unlike other universities in Turkey, Ozu was trying to find an alternative way to handle our notorious LYS-YGS system and improve efficiency in education nationwide.

Turkey's one of the biggest digital agency 41?29! designed a Facebook app that lets users test their future university years before they live it. By giving them the opportunity to make various choices and pick various paths, users watch their lives unfold on their "future" Facebook timeline. The stream was enriched by thousands of audio-visual material for the most realistic and open ended experience. This was the world's first to use the player's actual Facebook timeline to record the future, not the past. The individual timelines were saved as video CV's and went through to the public vote plus jury election. The lucky few were invited to a 1 minute "all or nothing" pitch

for a 4 year scholarship. With its world’s first “future timeline” concept, The Game of Your Life reached 250.000 people and created 2 million worth of earned media coverage.

As describe in Figure 3.1, first of all, students click the Ozu’s Facebook Page’s link via Facebook Ads. and Google Ads. Then, students need to like Ozu’s Facebook Page to start The Game of Your Life application. When students press the start button, Facebook Application requests permission to reach student’s information. If student allows the application, loading starts.

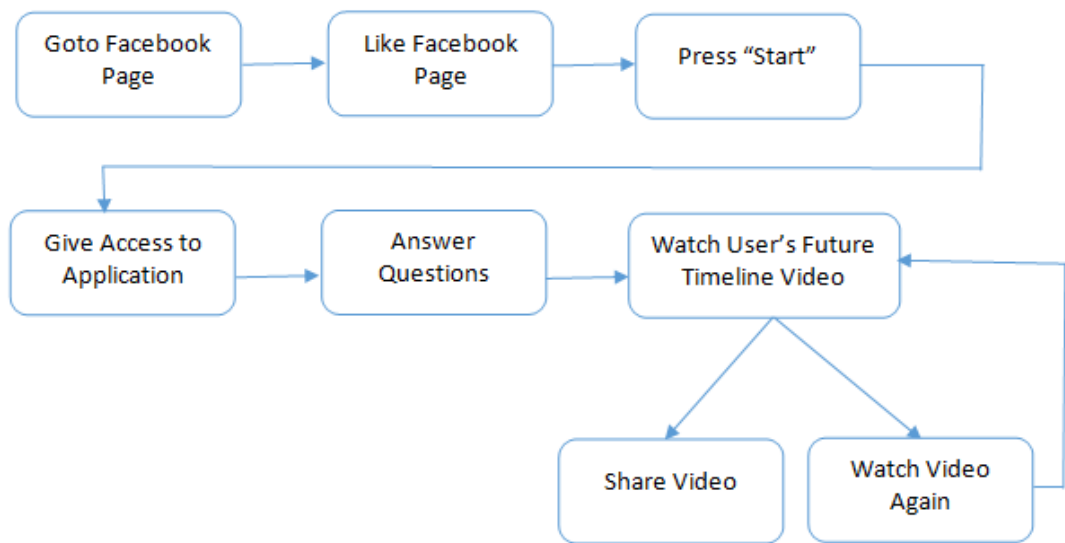


Figure 3.1. Game Steps of "The Game of Your Life"

After loading is completed, student answers 16 questions (Table 3.1) about their future expectations. These questions’ formats are multiple choice, scaled and open ended with 140 characters. While student answers questions, application shows imaginary future time posts according to student’s answer after every single question. At the end, application creates a video about student’s next 10 years’ Facebook timeline. Students can share this video or just application with their friends via Facebook or Twitter.

3.3 Conceptual Model and Hypothesis

This study’s proposed model (Figure 3.3) is based on Selin Küçükkancabaş’s study “Understanding University Choice Decisions of Turkish Students”. Küçükkancabaş’s (2001) model (Figure 3.2) argues that attitude toward university is influenced by three

main factors; University Characteristic, Information Sources, Student Characteristic. In addition, Küçükkancabaş’s study probes “Campus Visit” as a moderator variable which would strengthen the positive relationship between university characteristics, information sources and student characteristics attitude toward a particular university.

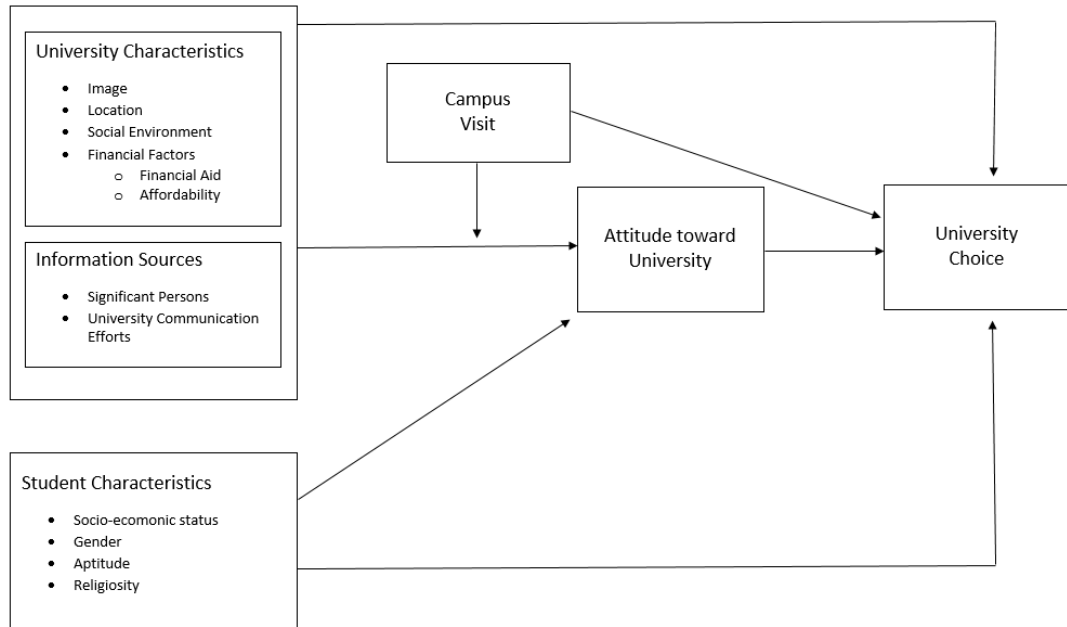


Figure 3.2. Model of Selin Küçükkancabaş [1]

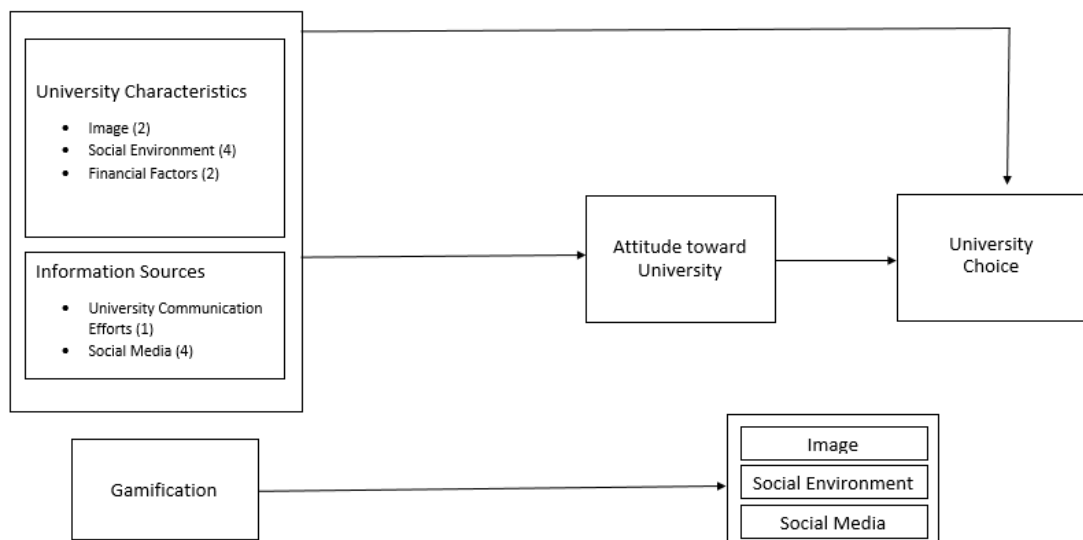


Figure 3.3. Conceptual Models of our Study

According to Küçükkancabaş (2001), University Characteristics composed of four sub-factors; Image, Location, Social Environmental Financial Factors (Financial Aid and Affordability). This study leave “location” out of the scope and probes University Characteristic with three sub-factors; Image, Social Environment and Financial Factors. Information Sources factor has two sub-factors in Küçükkancabaş’s study which are Significant Persons and University Communication Efforts.

This study is also has two sun-factors for Information Sources, Significant Persons is out of scope in this study. This study probes Social Media as an Information Source Factor differently from Küçükkancabaş’s model. Student Characteristic which has four sub-factors (Socio-economic Status, Gender, Aptitude and Religiosity) is also out of scope factor in our proposed model.

In this model, differently from previous studies, influence of the “Gamification” is probed independently as a moderator variable which would strengthen the positive relationship between university characteristics and information sources attitude toward a particular university.

The following hypotheses for each factor (i.e., Image, Social Environment, Social Media) are developed based on the literature review and the proposed model:

T-Test Analysis Hypothesises

1. Image Factor Hypothesis

- H_0 : There is a significant relation between Gamification and Image Factor.
- H_a : There is no a significant relation between Gamification and Image Factor.

2. Social Environment Factor Hypothesis

- H_0 : There is a significant relation between Gamification and Social Environment Factor.
- H_a : There is no a significant relation between Gamification and Social Environment Factor.

3. Social Media Factor Hypothesis

- H_0 : There is a significant relation between Gamification and Social Media Factor.
- H_a : There is no a significant relation between Gamification and Social Media Factor.

Frequency Analysis Hypothesises

1. Image Factor Hypothesis

- H_0 : Image Factor has effect on prospective students' university choice perception.
- H_a : Image Factor has no effect on prospective students' university choice perception.

2. Social Environment Factor Hypothesis

- H_0 : Social Environment Factor has effect on prospective students' university choice perception.
- H_a : Social Environment Factor has no effect on prospective students' university choice perception.

3. Social Media Factor Hypothesis

- H_0 : Social Media Factor has effect on prospective students' university choice perception.
- H_a : Social Media Factor has no effect on prospective students' university choice perception.

3.4 Survey Application

According to our conceptual proposed model and hypothesis, we prepare an online survey for Özyeğin University's first year students who may play "The Game of Your Life" game on Facebook. Survey is consist of 16 questions and all questions of survey were selected related to "The Game of Your Life" game's questions and factors of this study's proposed model. Our survey reached 304 students from 1264 students who registered the Özyeğin University at 2012. There is 41 students (17 percent of all participants) who played Özyeğin University's "The Game of Your Life" game.

This study is a survey-based study and based on an online questionnaire with 14 questions in Appendix A. Questionnaire consist of 3 part. The first part was include 9 6-scale questions which were related with Özyeğin University’s “The Game of Your Life” gamification based application’s questions in Appendix C and some sub-factors (Image, Social Environment, Financial and University’s Communication Efforts) of our proposed model. The second part was include just one “yes-no” question to examine that which participants played “The Game of Your Life” application. The third part of questionnaire was include 4 6-scale questions about social media sub-factor on our proposed model.

Part 1

These 6-scale questions (1: strongly disagree, 2: disagree, 3: disagree somewhat, 4: agree somewhat, 5: agree, 6: strongly agree and all intervals have same weight.) related with Özyeğin University’s “The Game of Your Life” gamification based application’s questions in Appendix C and some sub-factors (Image, Social Environment, Financial and University’s Communication Efforts) of our proposed model.). All question in Part 1 is also in Küçükkancabaş’s questionnaire in Appendix B.

We asked to participants that “There are some factors below which are effective on university selection process. Please score these factors according to importance of YOUR university selection process. (1 is “not important” and 6 is “all-important”).

Q1. Good reputation within the community... (1 2 3 4 5 6)

This question (Q1) is related with “Image” sub-factor in our proposed model.

Q2. Availability of various student clubs... (1 2 3 4 5 6)

This question (Q2) is related with “Social Environment” sub-factor in our proposed model and “Which student club you will join?” question in The Game Of Your Life application.

Q3. Availability of Part-time job opportunities... (1 2 3 4 5 6)

This question (Q3) is related with “Financial” sub-factor in our proposed model and “Will you work part-time?” question in The Game of Your Life application.

Q4. Student activities offered outside class (music festivals, film festivals etc.)... (1 2 3 4 5 6)

This question (Q4) is related with “Social Environment” sub-factor in our proposed model and “Which one you will concentrate on? (Academic/Social)” question in The Game Of Your Life application.

Q5. Availability of various majors... (1 2 3 4 5 6)

This question (Q5) is related with “Social Environment” sub-factor in our proposed model and “Which department will you attend?” question in The Game of Your Life application.

Q6. Availability of Internship opportunities... (1 2 3 4 5 6)

This question (Q6) is related with “Financial” sub-factor in our proposed model and “Where do you want to do internship?” question in The Game of Your Life application.

Q7. Web site of the university... (1 2 3 4 5 6)

This question (Q7) is related with “University Communication Efforts” sub-factor in our proposed model.

Q8. Availability of sport grants... (1 2 3 4 5 6)

This question (Q8) is related with “Social Environment” sub-factor in our proposed model and “Which sports club you will join?” question in The Game of Your Life application.

Q9. Graduates get good job opportunities... (1 2 3 4 5 6)

This question (Q9) is related with “Image” sub-factor in our proposed model and “How kind of job you want to work?” question in The Game of Your Life application.

Part 2

In this part there is only one yes-no question to examine “Gamification” as a moderator factor on sub-factors in our proposed model. We asked to participants that “Have you played the Facebook Game “The Game of Your Life” which was prepared by Özyeğin

University? (Yes/No)” (Q10) to examine that which participants played “The Game of Your Life” application.

Part 3

These 6-scale questions (1: strongly disagree, 2: disagree, 3: disagree somewhat, 4: agree somewhat, 5: agree, 6: strongly agree and all intervals have same weight.) related with Social Media sub-factor (As a Information Source) in our proposed model. We asked 4 6-scale questions to participants to understand that did they use popular social media tools as an information source during the university choice process?

Q11. Did you used Twitter as an information source during the university choice process? (1 2 3 4 5 6) (1 is “never” and 6 is “very often”.)

Q12. Did you used Facebook as an information source during the university choice process? (1 2 3 4 5 6) (1 is “never” and 6 is “very often”.)

Q13. Did you used Online Forums as an information source during the university choice process? (1 2 3 4 5 6) (1 is “never” and 6 is “very often”.)

Q14. Did you used Blogs as an information source during the university choice process? (1 2 3 4 5 6) (1 is “never” and 6 is “very often”.)

Chapter 4

Statistical Data Analysis and Results

In this chapter, the performed statistical analysis of survey on SPSS is presented, and then results are discussed for each survey question.

4.1 Factor Analysis

During to study for his research, after analysis of literature reviews and reference model, we prepared our conceptual model and a questionnaire for examining our proposed model and hypothesis. When we prepared and selected questions for questionnaire, we assumed that each questions are related with a factor which is used in our proposed model.

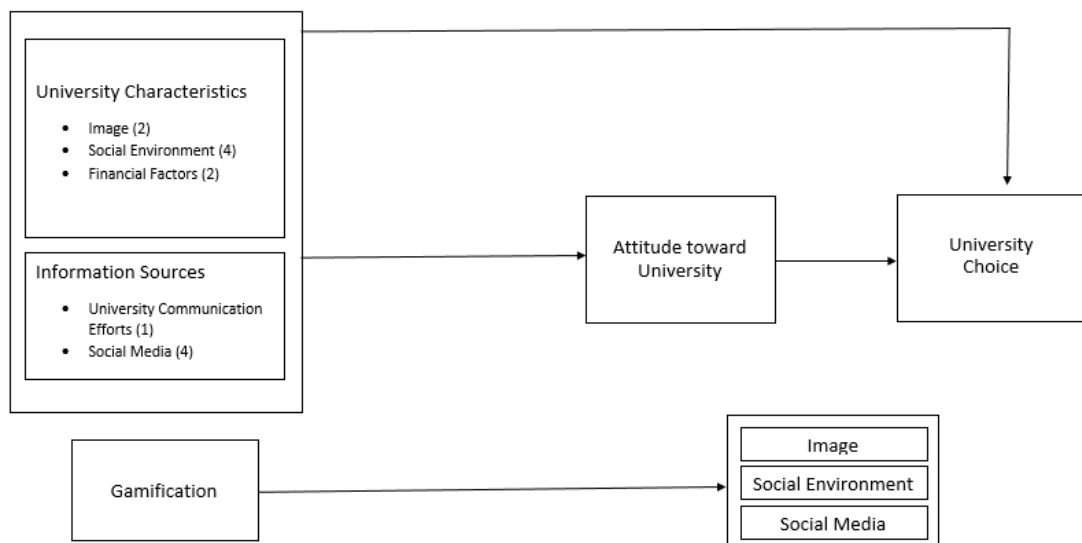


Figure 4.1. Proposed Model

In our survey questionnaire, it was foreseen that two questions (Good reputation within the community, Graduates get good job opportunities) were related with Image Factor; four questions (Availability of sport grants, Availability of various majors, Student activities offered outside class, Availability of various student clubs) were related with

Social Environment Factor (SocialE); and four questions (Did you used Twitter as an information source during the university choice process?, Did you used Facebook as an information source during the university choice process?, Did you used Blogs as a information source during the university choice process?, Did you used Online Forums as an information source during the university choice process?,) are related to Social Media Factor (SocialM).

We ignored two factors (Financial, University Communication Efforts) because of insufficient number of questions which were related with these factors.

To examine these assumptions, we run Rotated Component Matrix on SPSS for ten questions which were related with Image, Social Environment and Social Media factors according to our assumptions.

Predictably, Rotated Component Matrix results showed that there were three group of factors and group of questions listed below;

Group 1:

- Did you use Twitter as an information source during the university choice process?
- Did you use Facebook as an information source during the university choice process?
- Did you use Blogs as an information source during the university choice process?
- Did you use Online Forums as an information source during the university choice process?

Group 2:

- Availability of sport grants
- Availability of various majors
- Student activities offered outside class
- Availability of various student clubs

Group 3:

- Good reputation within the community

- Graduates get good job opportunities

As it is seen, Group 1 represents Social Media Factor (SocialM), Group 2 represents Social Environment Factor (SocialE), and Group 3 represents Image Factor (Image).

Table 4.1. Rotated Component Matrix

Questions	Component		
	1	2	3
Did you use Online Forums as an information source during the university choice process?	,823	,014	,017
Did you use Blogs as an information source during the university choice process?	,792	,140	-,101
Did you use Facebook as an information source during the university choice process?	,719	-,117	,224
Did you use Twitter as an information source during the university choice process?	,672	-,100	,079
Availability of various student clubs	,026	,839	-,172
Student activities offered outside class (music festivals, film festivals etc.)	-,027	,828	,017
Availability of sport grants	-,027	,612	,295
Availability of various majors	-,075	,492	,311
Graduates get good job opportunities	,143	-,025	,868
Good reputation within the community	,039	,308	,404

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

4.1.1 Image Factor

To frequency analysis of Image factor, we grouped two questions on our questionnaire (Good reputation within the community, Graduates get good job opportunities) which are related with Image Factor. Then we applied frequency analysis this group of questions. Results shows that Image is strongly important factor on students' university choice decision process. (Mean=5,20 on 6-point Likert scale).

Table 4.2. Image Factor Statistics - 1

N	Valid	231
	Missing	0
Mean		5,2078
Median		5,5000
Mode		6,00
Std. Deviation		,76904
Sum		1203,00

Table 4.3. Image Factor Statistics - 2

	Frequency	Percent	Valid Percent	Cumulative Percent
2,00	1	,4	,4	,4
2,50	1	,4	,4	,9
3,00	1	,4	,4	1,3
3,50	10	4,3	4,3	5,6
4,00	10	4,3	4,3	10,0
4,50	38	16,5	16,5	26,4
5,00	41	17,7	17,7	44,2
5,50	59	25,5	25,5	69,7
6,00	70	30,3	30,3	100,0
Total	231	100,0	100,0	

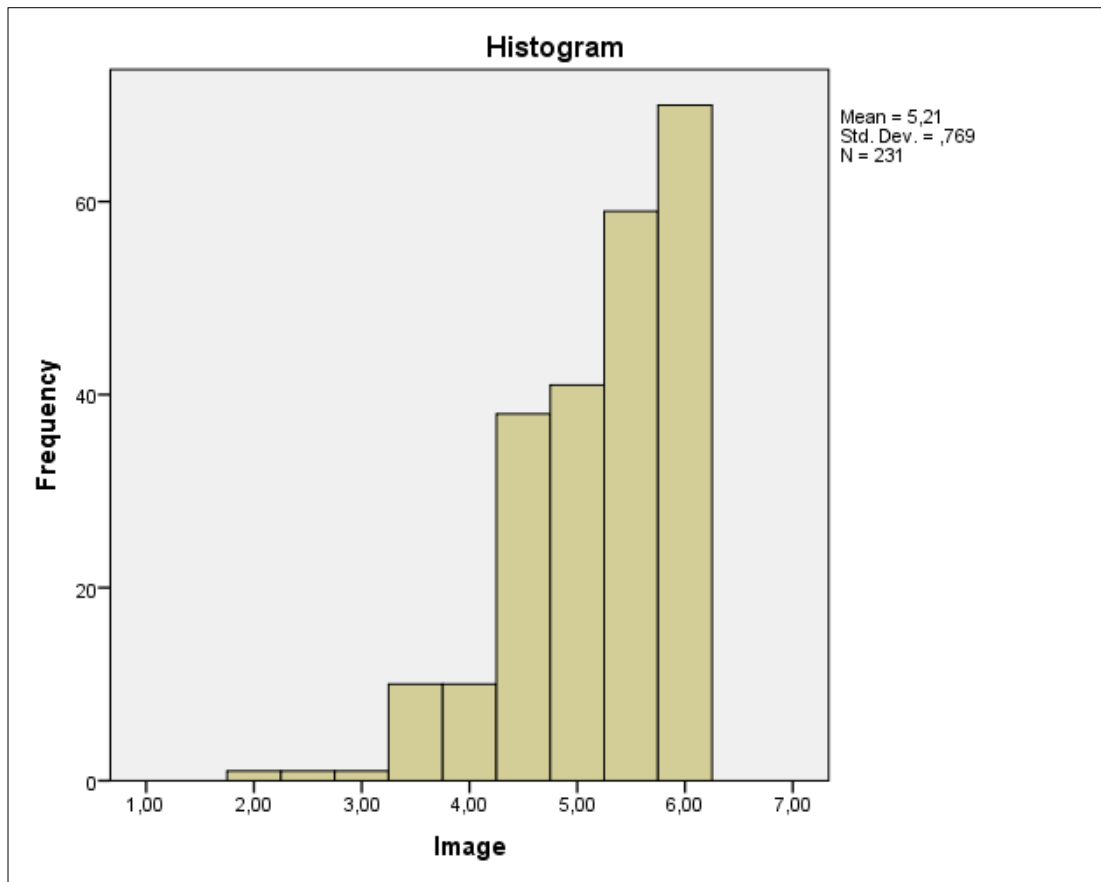


Figure 4.2. Image Factor Histogram Analysis

4.1.2 Social Environment Factor

To frequency analysis of Social Environment factor (SocialE), we grouped four questions on our questionnaire (Availability of sport grants, Availability of various majors, Student activities offered outside class, Availability of various student clubs) which are related with Social Environment Factor. Then we applied frequency analysis this group of questions. Results shows that Social Environment is another strongly important factor on students' university choice decision process. (Mean=4,78 on 6-point Likert scale).

Table 4.4. Social Environment Factor Statistics - 1

N	Valid	231
	Missing	0
Mean		4,7825
Median		5,0000
Mode		5,00
Std. Deviation		,86416
Sum		1104,75

Table 4.5. Social Environment Factor Statistics - 2

	Frequency	Percent	Valid Percent	Cumulative Percent
2,00	1	,4	,4	,4
2,50	1	,4	,4	,9
2,75	6	2,6	2,6	3,5
3,00	4	1,7	1,7	5,2
3,25	7	3,0	3,0	8,2
3,50	5	2,2	2,2	10,4
3,75	14	6,1	6,1	16,5
4,00	13	5,6	5,6	22,1
Valid 4,25	15	6,5	6,5	28,6
4,50	21	9,1	9,1	37,7
4,75	20	8,7	8,7	46,3
5,00	34	14,7	14,7	61,0
5,25	24	10,4	10,4	71,4
5,50	24	10,4	10,4	81,8
5,75	25	10,8	10,8	92,6
6,00	17	7,4	7,4	100,0
Total	231	100,0	100,0	

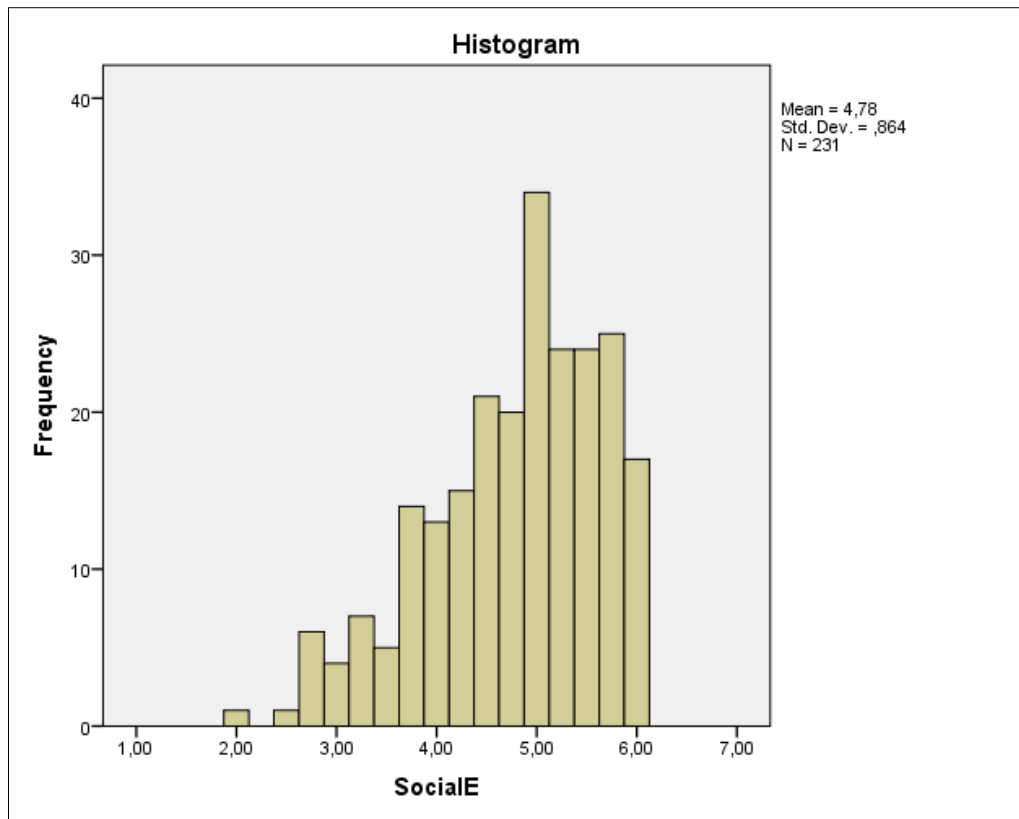


Figure 4.3. Social Environment Factor Histogram Analysis

4.1.3 Social Media Factor

To frequency analysis of Social Media factor (SocialM), we grouped four questions on our questionnaire (Did you used Twitter as an information source during the university choice process?, Did you used Facebook as an information source during the university choice process?, Did you used Blogs as an information source during the university choice process?, Did you used Online Forums as an information source during the university choice process?.) which are related with Social Media Factor. Then we applied frequency analysis this group of questions. Results shows that Social Media is normal level important factor on students' university choice decision process. (Mean=3,30 on 6-point Likert scale).

Table 4.6. Social Media Factor Statistics - 1

N	Valid	231
	Missing	0
Mean		3,3030
Median		3,2500
Mode		1,00
Std. Deviation		1,36837
Sum		763,00

Table 4.7. Social Media Factor Statistics - 2

	Frequency	Percent	Valid Percent	Cumulative Percent
1,00	25	10,8	10,8	10,8
1,25	2	,9	,9	11,7
1,50	6	2,6	2,6	14,3
1,75	6	2,6	2,6	16,9
2,00	12	5,2	5,2	22,1
2,25	10	4,3	4,3	26,4
2,50	10	4,3	4,3	30,7
2,75	17	7,4	7,4	38,1
3,00	14	6,1	6,1	44,2
3,25	16	6,9	6,9	51,1
3,50	14	6,1	6,1	57,1
3,75	15	6,5	6,5	63,6
4,00	12	5,2	5,2	68,8
4,25	19	8,2	8,2	77,1
4,50	17	7,4	7,4	84,4
4,75	6	2,6	2,6	87,0
5,00	6	2,6	2,6	89,6
5,25	8	3,5	3,5	93,1
5,50	5	2,2	2,2	95,2
5,75	3	1,3	1,3	96,5
6,00	8	3,5	3,5	100,0
Total	231	100,0	100,0	

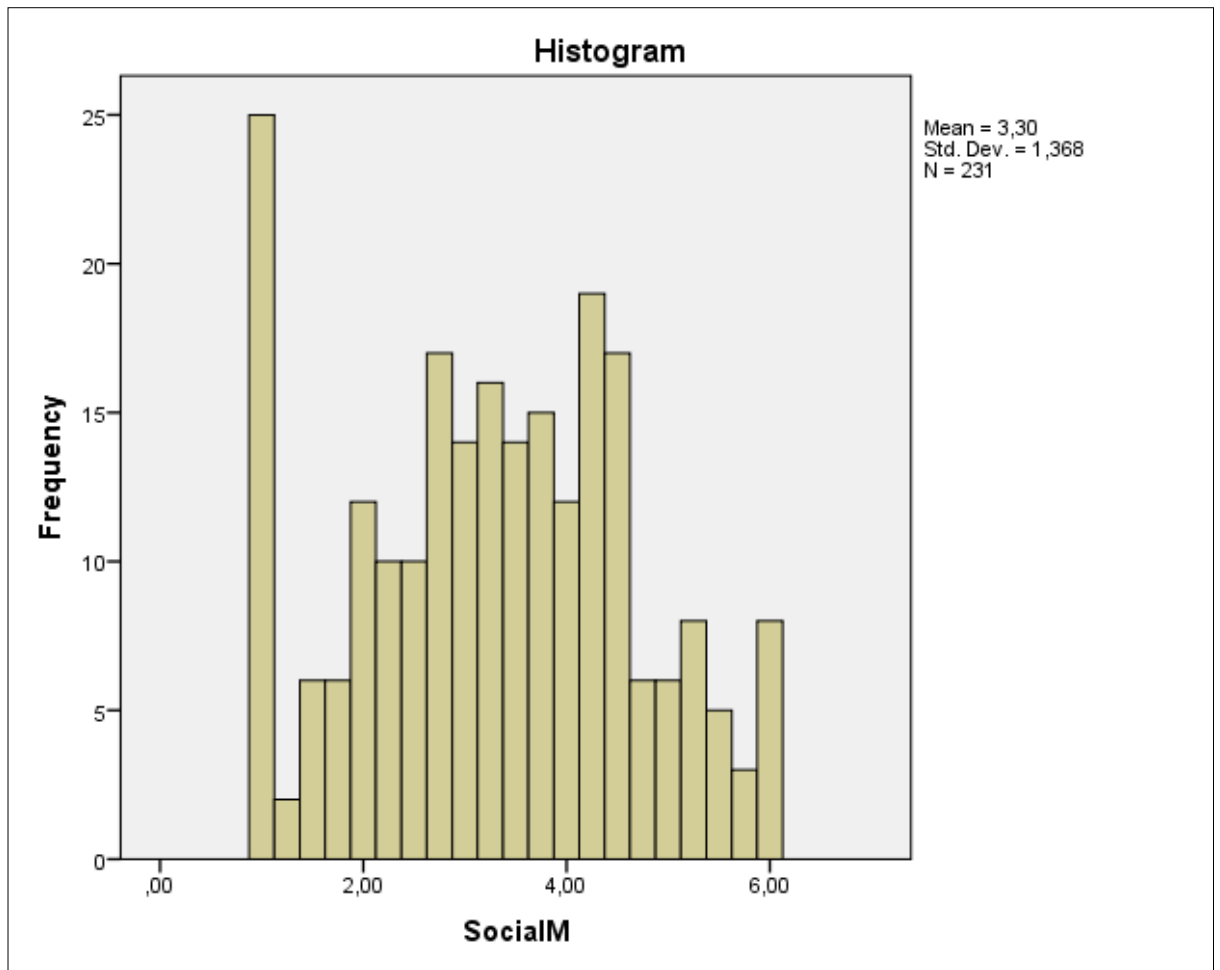


Figure 4.4. Social Media Factor Histogram Analysis

4.2 T-Test Analysis

We applied t-test analysis to each factor to understand that relation between factors and Gamification is significant or not significant. In t-test analyses, if 2-tailed sig. value is 0.05 or under, it means that relation is significant. If 2-tailed sig. value is over 0.05, it means that relation is not significant.

In our t-test results, 2-tailed sig. value is over 0.05 for Image and Social Environment factors and it shows that there is no significant relationship between Gamification and these factors. On the other hand, for social media factor, 2-tailed sig. value is under 0.05 in t-test and it shows that there is significant relation between Gamification and Social Media factor. You can see the t-test results for each factor below.

4.2.1 T-Test for Image Factor

As a result of t-test for Image factor, 2-tailed sig. value is over 0.05 (0.820) and mean of students who played “The Game of Your Life” (5,1829) and mean of students who didn’t play “The Game of Your Life” (5,2132) are very close. So, it shows that there is no significant relation between Gamification and Image Factor.

Table 4.8. T-Test for Image Factor Statistics

	Game	N	Mean	Std. Deviation	Std. Error Mean
Image	1,00	41	5,1829	,72246	,11283
	2,00	190	5,2132	,78044	,05662

Table 4.9. T-Test for Image Factor - Independent Samples Test

		T-Test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Image	Equal variances assumed	-,228	229	,820	-,03023
	Equal variances not assumed	-,239	61,851	,812	-,03023

4.2.2 T-Test for Social Environment Factor

As a result of t-test for social environment factor, 2-tailed sig. value is over 0.05 (0.337) and mean of students who played “The Game of Your Life” (4,6646) and mean of students who didn’t play “The Game of Your Life” (4,8079) are very close. So, it shows that there is no significant relation between Gamification and Social Environment Factor.

Table 4.10. T-Test for Social Environment Factor Statistics

	Game	N	Mean	Std. Deviation	Std. Error Mean
SocialE	1,00	41	4,6646	,99154	,15485
	2,00	190	4,8079	,83488	,06057

Table 4.11. T-Test for Social Environment Factor - Independent Samples Test

		T-Test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
SocialE	Equal variances assumed	-,963	229	,337	-,14326
	Equal variances not assumed	-,862	52,913	,393	-,14326

4.2.3 T-Test for Social Media Factor

As a result of t-test for social media factor, 2-tailed sig. value is under 0.05 and mean of students who played “The Game of Your Life” (3,9817) and mean of students who didn’t play “The Game of Your Life” (3,1566) are not very close. So, it shows that there is significant relation between Gamification and Social Media Factor.

Table 4.12. T-Test for Social Media Factor Statistics

	Game	N	Mean	Std. Deviation	Std. Error Mean
socialM	1,00	41	3,9817	1,18241	,18466
	2,00	190	3,1566	1,36428	,09898

Table 4.13. T-Test for Social Media Factor - Independent Samples Test

		T-Test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
socialM	Equal variances assumed	3,591	229	,000	,82513
	Equal variances not assumed	3,938	65,146	,000	,82513

4.3 Frequency Analysis for Social Media Factor Elements

To understand effect of each social media elements in our questionnaire (Facebook, Twitter, Online Forums and Blogs) separately, we looked up frequencies of each questions. Results showed that means of each social media element are close to each other; all means are between 3.04 and 3,58. So, we can say that students use social media elements as information source on a par.

Table 4.14. Frequency Analysis for Twitter - 1

Question: Did you use Twitter as an information source during the university choice process?

N	Valid	231
	Missing	0
Mean		3,16
Median		3,00
Mode		1
Std. Deviation		1,914
Sum		729

Table 4.15. Frequency Analysis for Twitter - 2

Question: Did you use Twitter as an information source during the university choice process?

	Frequency	Percent	Valid Percent	Cumulative Percent
1	75	32,5	32,5	32,5
2	31	13,4	13,4	45,9
3	19	8,2	8,2	54,1
Valid 4	34	14,7	14,7	68,8
5	33	14,3	14,3	83,1
6	39	16,9	16,9	100,0
Total	231	100,0	100,0	

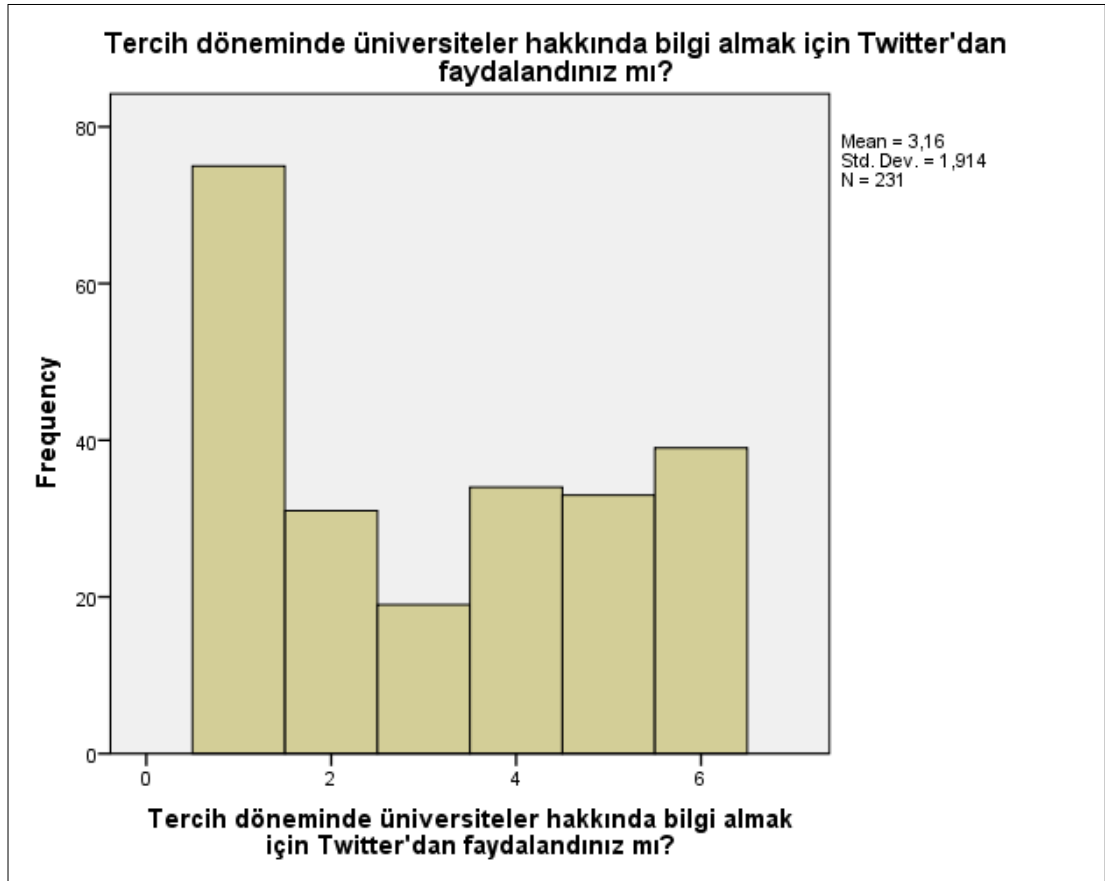


Figure 4.5. Histogram Analysis for Twitter

Table 4.16. Frequency Analysis for Facebook - 1

Question: Did you use Facebook as an information source during the university choice process?

N	Valid	231
	Missing	0
Mean		3,43
Median		4,00
Mode		1
Std. Deviation		1,775
Sum		793

Table 4.17. Frequency Analysis for Facebook - 2

Question: Did you use Facebook as an information source during the university choice process?

	Frequency	Percent	Valid Percent	Cumulative Percent
1	55	23,8	23,8	23,8
2	24	10,4	10,4	34,2
3	29	12,6	12,6	46,8
Valid 4	46	19,9	19,9	66,7
5	43	18,6	18,6	85,3
6	34	14,7	14,7	100,0
Total	231	100,0	100,0	

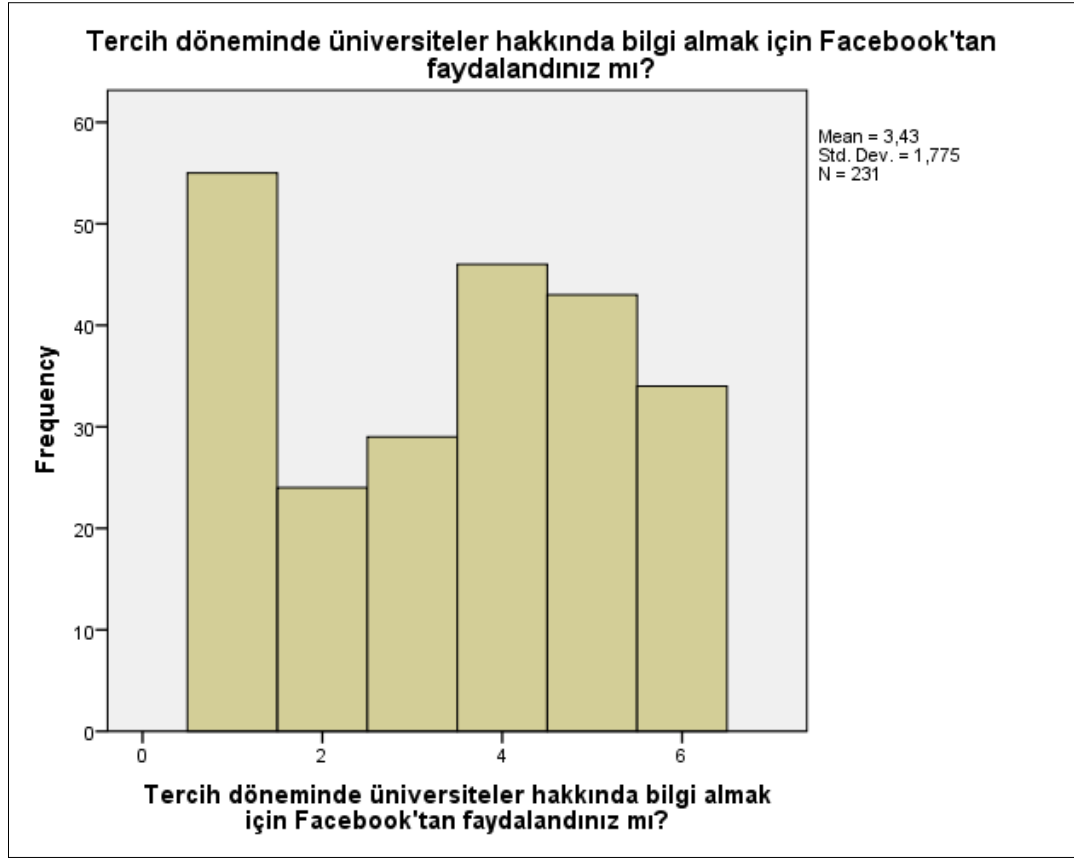


Figure 4.6. Histogram Analysis for Facebook

Table 4.18. Frequency Analysis for Online Forums - 1

Question: *Did you use Online Forums as an information source during the university choice process?*

N	Valid	231
	Missing	0
Mean		3,58
Median		4,00
Mode		1
Std. Deviation		1,813
Sum		828

Table 4.19. Frequency Analysis for Online Forums - 2

Question: Did you use Online Forums as an information source during the university choice process?

	Frequency	Percent	Valid Percent	Cumulative Percent
1	51	22,1	22,1	22,1
2	20	8,7	8,7	30,7
3	35	15,2	15,2	45,9
Valid 4	38	16,5	16,5	62,3
5	42	18,2	18,2	80,5
6	45	19,5	19,5	100,0
Total	231	100,0	100,0	

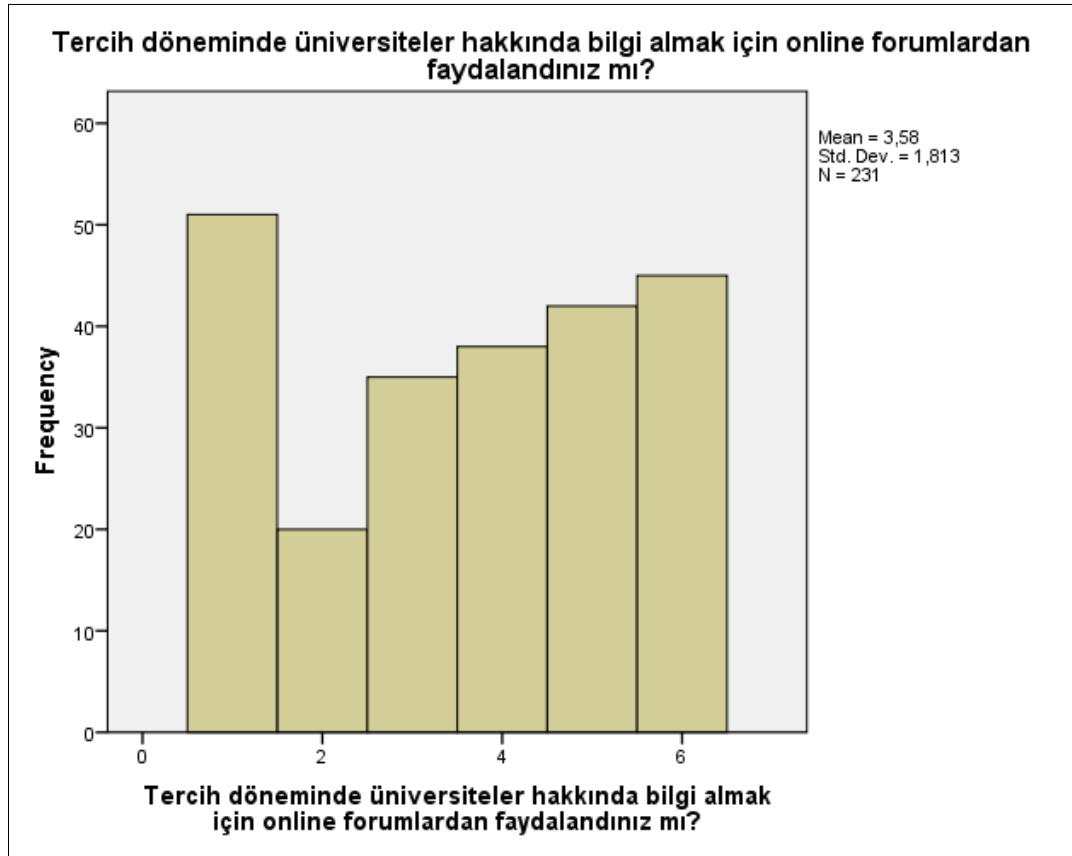


Figure 4.7. Histogram Analysis for Online Forums

Table 4.20. Frequency Analysis for Blogs - 1

Question: Did you used Blogs as an information source during the university choice process?

N	Valid	231
	Missing	0
Mean		3,04
Median		3,00
Mode		1
Std. Deviation		1,750
Sum		702

Table 4.21. Frequency Analysis for Blogs - 2

Question: Did you used Blogs as an information source during the university choice process?

	Frequency	Percent	Valid Percent	Cumulative Percent
1	68	29,4	29,4	29,4
2	36	15,6	15,6	45,0
3	25	10,8	10,8	55,8
Valid 4	52	22,5	22,5	78,4
5	21	9,1	9,1	87,4
6	29	12,6	12,6	100,0
Total	231	100,0	100,0	

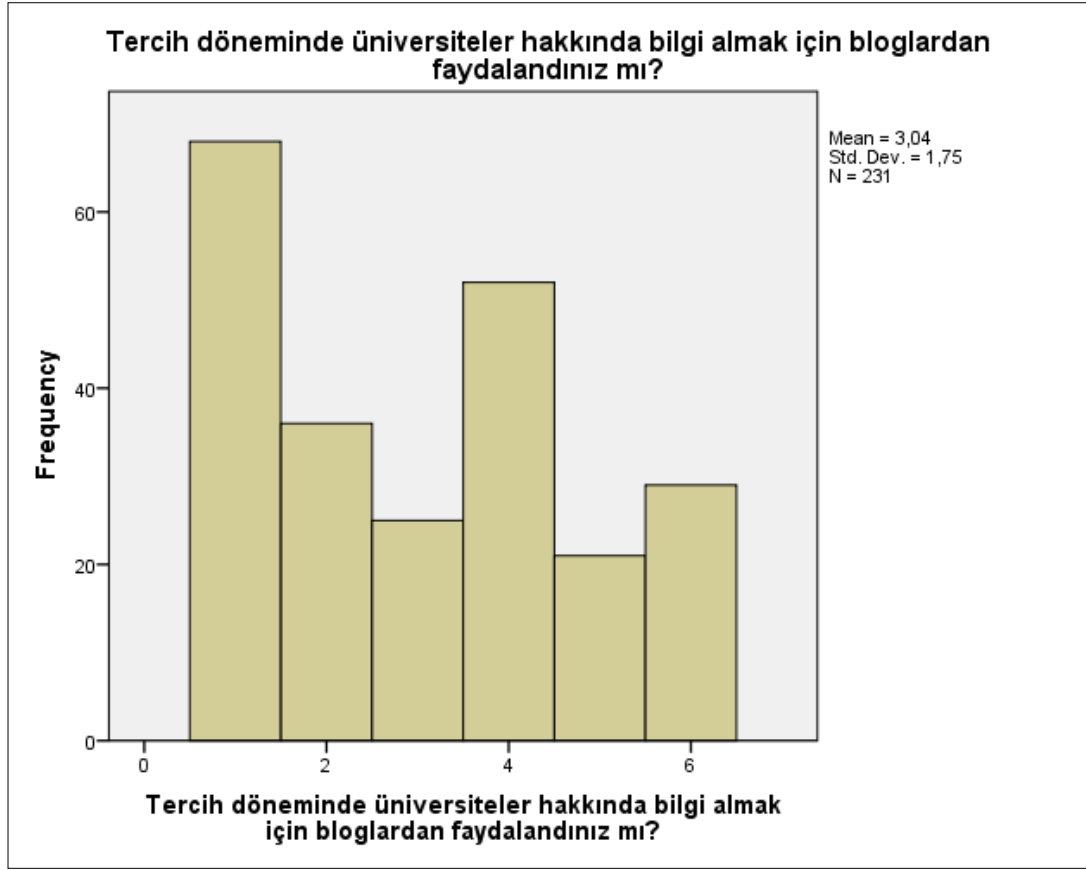


Figure 4.8. Histogram Analysis for Blogs

4.4 Discussion and Limitations

This survey based study examined that social media usage as information source on university decision process, effects of image and social environments factors on university decision process and relation between gamification and Image, Social Environment, Social Media factors.

Results indicate that Image and Social Environment are very important factors on students' university choice decision process. In details, Image is the most important factor (mean=5,20) as expected. Students consider good reputation of university within the community and good job opportunities of graduates important. Another critical factor on students' university choice process is social environment. Availability of sport grants, availability of various majors, student activities offered outside class and availability of various student clubs have significant influence on students' university choice perception. In addition, usage of social media as

information source is not intensive but also considerable (mean=3,30). All social media elements (social networks) have close usage percentages but in detail; online forums are mostly used as information source than other social network (mean=3,58). In four social media elements of our questionnaire, blogs have lowest percentage (mean=3,04) of usage as information source.

As known, popularity and also usage rate of social networks are increasing rapidly day by day. This study's questionnaire applied on 2012 and usage rate of social media became widespread in two years. So, it's possible to say that at the present time, usage rate of social media as information source is higher than this study's results.

On gamification site, our study examined that is there a significant relation between gamification and factors of our proposed model (social environment, image, and social media). Results of questionnaire indicates that there is no significant relation between gamification and image or social environment factors. Behaviour of students' who played "The Game of Your Life" and students' who didn't play "The Game of Your Life" are almost same on social environment and image factors. On the other hand, there is significant relation between gamification and social media factor. This result is not surprisingly because gamification and social networks are very close concepts. Many of social networks are using gamification concept to increase their number and loyalty of users.

Most important limitation of this study is that there was only one appreciable gamification application which was applied by an university. So, study's population became narrow. If number of significant gamification applications will increase, it will possible to make more comprehensive studies in future. And other limitation of this study is number of questions in "The Game of Your Life" gamification application. This situation also limited our study's number of question. For this reason, we cannot obtain results finance factor and university communication efforts and we leaved these factors out of the scope. As it has been mentioned before, if number of significant and comprehensive gamification applications will increase, this limitation also will go away in future works.

Chapter 5

Conclusion

With the passing years, decision processes, marketing methods, media and information sources are changing. During the recent years, social media and gamification concepts gain popularity in both daily life and academic studies in all over the world. In addition, university choice process becomes more important for prospective students and also their parents, especially in Turkey. On the basis of these alteration and needs, we purposed to understand “The Effects of Social Media and Gamificion on Prospective Students' University Choice Perception” with this study. For our survey based case study, we choose “The Game of Your Life” by Özyeğin University which was only one gamification application applied by a university.

As expected, our study showed that Social Environment and Image are very important for prospective students during their university choice perception. On the other hand, prospective students use social media as information source but usage rate is less than our expectation. In addition, contrary to expectations, there is no significant relation between gamification and social environment or image. Another clear result is that gamification has significant relation with social media factor as expected.

When we started to this research, there was only one example for gamification application which was applied by a university. In future, with increasing the gamification examples and applications, more comprehensive researches may achievable.

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Curriculum Vitae

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Conference Proceedings:

- F. Ustun, M. N. Aydin, R. Booth “Türkiye’de Gençlerin Twitter Kullanımı Araştırması” on Yeni Medya Çalışmaları I. Ulusal Kongresi, Kocaeli, TURKEY, 7-8 May 2013, p. 383-395.

Appendix A: Survey Questions (Turkish & English)

Aşağıda üniversite seçiminde etkili olan bazı faktörler yer almaktadır. Bu faktörlerin SİZİN üniversite seçiminizde ne kadar önemli olduğunu en uygun rakamı işaretleyerek değerlendiriniz.		
1	Toplum gözünde üniversitenin prestiji	1 2 3 4 5 6
2	Çeşitli öğrenci kulüplerinin olması	1 2 3 4 5 6
3	Part-time (yarı-zamanlı) çalışma fırsatlarının sunulması	1 2 3 4 5 6
4	Çeşitli ders dışı etkinliklerin olması (müzik festivalleri, film festivalleri, vb.)	1 2 3 4 5 6
5	Çeşitli bölümlerde eğitim veriyor olması	1 2 3 4 5 6
6	Staj imkanları sunulması	1 2 3 4 5 6
7	Üniversitenin web sitesi	1 2 3 4 5 6
8	Çeşitli spor faaliyetlerine katılma imkanının olması	1 2 3 4 5 6
9	Üniversitenin iş hayatı ile yakın ilişkilerinin olması	1 2 3 4 5 6
10	Özyeğin Üniversitesi tarafından hazırlanan "Hayatının Oyunu" isimli Facebook oyununu oynadınız mı?	A) Evet B) Hayır
11	Tercih döneminde üniversiteler hakkında bilgi almak için Twitter'dan faydalandınız mı?	1 2 3 4 5 6
12	Tercih döneminde üniversiteler hakkında bilgi almak için Facebook'tan faydalandınız mı?	1 2 3 4 5 6
13	Tercih döneminde üniversiteler hakkında bilgi almak için online forumlardan faydalandınız mı?	1 2 3 4 5 6
14	Tercih döneminde üniversiteler hakkında bilgi almak için bloglardan faydalandınız mı?	1 2 3 4 5 6

There are some factors below which are effective on university selection process. Please score these factors according to importance of YOUR university selection process.		
1	Good reputation within the community	1 2 3 4 5 6
2	Availability of various student clubs	1 2 3 4 5 6
3	Availability of Part-time job opportunities	1 2 3 4 5 6
4	Student activities offered outside class (music festivals, film festivals etc.)	1 2 3 4 5 6
5	Availability of various majors	1 2 3 4 5 6
6	Availability of Internship opportunities	1 2 3 4 5 6
7	Web site of the university	1 2 3 4 5 6
8	Availability of sport grants	1 2 3 4 5 6
9	Graduates get good job opportunities	1 2 3 4 5 6
10	Have you played the Facebook Game “The Game of Your Life” which was prepared by Özyeğin University?	A) Evet B) Hayır
11	Did you used Twitter as an information source during the university choice process?	1 2 3 4 5 6
12	Did you used Facebook as an information source during the university choice process?	1 2 3 4 5 6
13	Did you used Online Forums as an information source during the university choice process?	1 2 3 4 5 6
14	Did you used Blogs as an information source during the university choice process?	1 2 3 4 5 6

Appendix B: Selin Küçükkancabaş's Survey Questions

Üniversitelerin herbirini okuyacağım ifadelere göre nasıl değerlendirdiğinizi belirtir misiniz?

Kötü	1 2 3 4 5 6	İyi
Sevmem	1 2 3 4 5 6	Severim
Vasat	1 2 3 4 5 6	Üstün
Çekici Değil	1 2 3 4 5 6	Çekici

... Üniversitesini ne düzeyde tercih ettiğinizi belirtir misiniz?

(1= Hiç tercih etmem 6= Çok tercih ederim)

Bogaziçi Üniversitesi	1 2 3 4 5 6
ITU	1 2 3 4 5 6
Sabancı Üniversitesi	1 2 3 4 5 6
Koc Üniversitesi	1 2 3 4 5 6
Fatih Üniversitesi	1 2 3 4 5 6

Aşağıda üniversite seçiminde etkili olan bazı faktörler yer almaktadır. Bu faktörlerin SİZİN üniversite seçiminizde ne kadar önemli olduğunu en uygun rakamı işaretleyerek değerlendiriniz? (1= Hiç önemli değil 6= Çok Önemli)

Toplum gözünde üniversitenin prestiji 1 2 3 4 5 6

Ailenizin tavsiye etmiş olması 1 2 3 4 5 6

Üniversiteyi ziyaret etmek 1 2 3 4 5 6

Üniversitenin yurtdışındaki çeşitli üniversitelerde öğrenci değişim programları imkanı sunması 1 2 3 4 5 6

Okul ücretlerini ödemede kolaylıklar sunulması 1 2 3 4 5 6

Yurt yardımı yapılması 1 2 3 4 5 6

Çeşitli öğrenci klüplerinin olması 1 2 3 4 5 6

Üniversitenin yemek yardımı yapması 1 2 3 4 5 6

Eđitim ücretleri 1 2 3 4 5 6

Part-time (yarı zamanlı) alıřma fırsatlarının sunulması 1 2 3 4 5 6

O üniversitede okuyan veya mezun olmuş akrabaların tavsiyesi 1 2 3 4 5 6

Üniversitelerle ilgili dergi/gazete/billboardlarda yayınlanan reklamlar 1 2 3 4 5 6

Çeřitli ders dıřı etkinliklerin olması (müzik festivalleri, film festivalleri vb.) 1 2 3 4 5 6

Üniversite tanıtım günleri 1 2 3 4 5 6

Çeřitli bölümlerde eğitim veriyor olması 1 2 3 4 5 6

Öđretmenlerinizin tavsiyesi 1 2 3 4 5 6

Üniversitenin verdiği spor bursları 1 2 3 4 5 6

Burs imkanlarının olması 1 2 3 4 5 6

Mezunlarının iyi üniversitelerde eğitimlerine devam etmeleri 1 2 3 4 5 6

Staj imkanları sunulması 1 2 3 4 5 6

Arkadařlarınızın tavsiyesi 1 2 3 4 5 6

Üniversitenin web sitesi 1 2 3 4 5 6

Mezunlarının iyi iş imkanlarına sahip olmaları 1 2 3 4 5 6

Kampüsünün çekici olması 1 2 3 4 5 6

Eđitime katkıda bulunan eşya yardımı yapılması (Laptop vb.) 1 2 3 4 5 6

Çeřitli spor faaliyetlerine katılma imkanının olması 1 2 3 4 5 6

Okula ya da dershaneye gönderilen üniversiteyi tanıtıcı CD / brořürler 1 2 3 4 5 6

Öđretim üyelerinin TV'de üniversite ile ilgili verdiği bilgiler 1 2 3 4 5 6

Üniversite ile ilgili televizyonda yayınlanan reklamlar 1 2 3 4 5 6

Lise danıřmanlarınızın tavsiyesi 1 2 3 4 5 6

Üniversitenin řehrin içindeki yeri 1 2 3 4 5 6

ÖSYM tercih rehberinde üst sıralarda bulunması 1 2 3 4 5 6

Yabancı dilde eğitim verilmesi 1 2 3 4 5 6

Seyahat yardımı yapılması 1 2 3 4 5 6

Üniversitenin yaptığı para yardımı 1 2 3 4 5 6

Üniversitenin iş hayatı ile yakın ilişkilerinin olması 1 2 3 4 5 6

Eđitim fuarları 1 2 3 4 5 6

Üniversitenin tanıtım katalođu 1 2 3 4 5 6

Üniversitenin politik duruşu 1 2 3 4 5 6

Ulaşım kolaylıđı 1 2 3 4 5 6

Üniversite sınavından istediğiniz puanı aldığınızı düşünerek lütfen
Üniversitesi ile ilgili okuyacağım ifadelere ne derece katıldığınızı belirtir misiniz?
(1= Kesinlikle Katılmıyorum 6= Kesinlikle Katılıyorum)

Toplum gözünde prestijli bir üniversite 1 2 3 4 5 6

Ailemin tavsiye ettiği bir üniversite 1 2 3 4 5 6

Yurtdışındaki çeşitli üniversitelerde öğrenci değişim programlarına sahip 1 2 3 4 5
6

Okul ücretlerinin ödenmesinde kolaylıklar sunuyor 1 2 3 4 5 6

Yurt masraflarına yardımda bulunuyor 1 2 3 4 5 6

Çok çeşitli öğrenci klüplerine sahip 1 2 3 4 5 6

Yemek masraflarına yardımda bulunuyor 1 2 3 4 5 6

Eğitim masraflarını karşılayabilirim 1 2 3 4 5 6

Part-time (yarı zamanlı) çalışma fırsatları sunuyor 1 2 3 4 5 6

Bu üniversiteden mezun veya okuyan akrabalarımın tavsiye ettiği bir üniversite 1 2
3 4 5 6

Gazete, dergi ve billboardlarda yoğun reklam yapıyor 1 2 3 4 5 6

Ders dışı çok çeşitli etkinliklere sahip (müzik festivalleri, film festivalleri vb.) 1 2 3
4 5 6

Başarılı tanıtım günleri düzenlemektedir 1 2 3 4 5 6

Çeşitli alanlarda eğitim veriyor 1 2 3 4 5 6

Öğretmenlerimin tavsiye ettiği üniversite 1 2 3 4 5 6

Spor bursu imkanı sunuyor 1 2 3 4 5 6

Çeşitli burs imkanları sunuyor 1 2 3 4 5 6

Mezunları iyi üniversitelerde eğitimlerine devam ediyorlar 1 2 3 4 5 6

İyi staj imkanları sunmaktadır 1 2 3 4 5 6

Arkadaşlarımın tavsiye ettiği bir üniversite 1 2 3 4 5 6

İyi tasarlanmış bir web sitesine sahip 1 2 3 4 5 6

- Mezunları iyi iş imkanlarına sahip oluyorlar 1 2 3 4 5 6
- Çok etkileyici bir kampüse sahip 1 2 3 4 5 6
- Eğitime katkıda bulunan eşya yardımında bulunuyor (Laptop vb.) 1 2 3 4 5 6
- Çok çeşitli spor faaliyetlerine katılma imkanı sunuyor 1 2 3 4 5 6
- Bilgi verici CD ve broşürler gönderiyor 1 2 3 4 5 6
- Öğretim üyeleri tanıtım yapmak için sık sık televizyon programlarına katılıyor 1 2 3 4 5 6
- Televizyondaki reklamlarını begeniyorum 1 2 3 4 5 6
- Lise danışmanımın tavsiye ettiği bir üniversite 1 2 3 4 5 6
- Şehir içinde çok uygun bir yerde bulunuyor 1 2 3 4 5 6
- ÖSYM tercih rehberinde üst sıralarda bulunuyor 1 2 3 4 5 6
- Yabancı dilde eğitim verilmektedir 1 2 3 4 5 6
- Seyahat masraflarıma yardımında bulunuyor 1 2 3 4 5 6
- Çeşitli para yardımlarınıda bulunuyor 1 2 3 4 5 6
- İş hayatı ile yakın ilişki içinde 1 2 3 4 5 6
- Eğitim fuarlarına yoğun bir şekilde katılıyor 1 2 3 4 5 6
- Bilgi verici bir tanıtım kataloğuna sahip 1 2 3 4 5 6
- Üniversitenin politik duruşu bana uyuyor 1 2 3 4 5 6
- Bu üniversiteye ulaşmak kolay 1 2 3 4 5 6

- Boğaziçi Üniversitesi kampüsünü ziyaret ettiniz mi? Evet _____ Hayır _____
- İTU kampüsünü ziyaret ettiniz mi? Evet _____ Hayır _____
- Sabancı Üniversitesi kampüsünü ziyaret ettiniz mi? Evet _____ Hayır _____
- Koç Üniversitesi kampüsünü ziyaret ettiniz mi? Evet _____ Hayır _____
- Fatih Üniversitesi kampüsünü ziyaret ettiniz mi? Evet _____ Hayır _____

Appendix C: Questions of “The Game of Your Life”

Number	Questions
1	Which department will you attend? a) Business Administration b) Psychology c) Gastronomy d) Hotel Management e) Pilotage f) Law g) Engineering
2	_____ sport is more popular than football in Turkey? a) Some b) Any c) None
3	Where do you want to do internship? a) GAP b) Marks & Spencer c) None
4	Which one you will concentrate on? Academic ←----- -----→ Social
5	Which student club you will join? a) Photography b) Cinema c) Technology d) Radio e) Music f) Theatre g) Athenaeum h) Dance i) None
6	Which sports club you will join? a) Football b) Basketball c) Volleyball d) Archery e) None
7	Which one you will concentrate on? Academic ←----- -----→ Social
8	Where do you want to do internship? a) GAP

	b) Marcs & Spencer c) None
9	Which one you will concentrate on? Academic ←----- -----→ Social
10	Will you work part-time? a) Yes b) No
11	Which one you will concentrate on? Academic ←----- -----→ Social
12	How kind of job you want to work? ----- (Open ended with 140 characters.)
13	Which one you will concentrate on? Academic ←----- -----→ Social
14	Which one you will manage? a) Game Arcade b) Table Soccer c) Vending Machine d) Ozu Store e) None
15	Where will you want to go for Erasmus? a) France b) Holland c) Lithuania d) Germany e) Italy
16	What is the success in your opinion? ----- (Open ended with 140 characters.)