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July 01, 2018
Prof. Dr. Muzaffer ELMAS
Sakarya University

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DIFFERENT APPROACHES TO THESIS PROCESS IN PRACTICE BASED ART EDUCATION IN REGARDS TO STUDENT TENDENCIES

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ABSTRACT
This paper is going to deal with thesis writing process and styles, in regards to student tendencies in graduate level art education.
There are two levels in graduate level art education in academic manner in Turkey. One of them is Master of Arts or Master of Fine Arts level after undergraduate education and Proficiency in Art education after M.A or M.F.A process. In this paper I will focus on M.A or M.F.A level thesis writing process through my experience as an academic and former art student.
The main reasons behind questioning thesis writing process and thesis styles is the different attitudes across departments of the same faculty and divergences between art faculties. The other reason is the tendencies of students as a very important determining factor in thesis writing. The outcomes will be gathered through my experiences and examination of written theses in various Fine Arts Faculties. The paper will also include thesis advisor's observations, problems that they face with and solutions they invent.
Keywords: Master of Arts, Thesis, Art Work Report, Fine Arts Education, Student Tendency

INTRODUCTION

Before beginning, there are some points that needs to be clarified. The first point is the definition. Different names are given to the written outcomes of master level studies, such as thesis, art work report, master level art work report or art work text. During this paper, written outcomes of master level students will be referred as `thesis`.

Private universities are excluded from this study, the study will be based on the state universities' policies on master thesis in Fine Arts Faculties. The reason behind this choice is that private universities usually prefer to have art and design or visual communication faculties in their structure, on the other hand, state universities have fine arts faculties.

Lastly, within the scope of this study, only some fine art faculties are examined and fine arts education departments are excluded from the context. The reason behind this selection is that education departments or faculties have a certain format about thesis process and style. Thus, the focus is going to be on the fine arts faculties and especially on their painting and sculpture departments.

Theses Titles of Universities

According to my researches and observations, I have seen that fine arts faculties does not have certain title and style about master level thesis format. The table below will manifest the situation. The results shown on the table is based on a survey across 6 state universities` web sites. Since some universities` web sites do not have English version or there is a web site with a very weak English, it is hard to detect how these universities call their Master Level practice based art education programs and how do they refer to their thesis.

Table 1. Master Level Written Outcome Names Given By State Universities

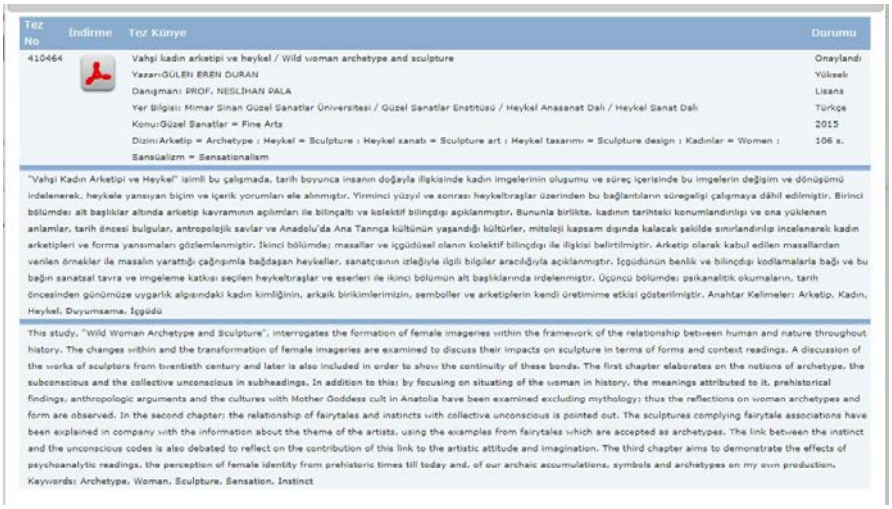
University Name	Institution Name	Program Name	Written Outcome Name
Anadolu University	Graduate School of Fine Arts	Master of Arts (MA) Degree	Master Thesis
Mimar Sinan Fine Arts University	Institute of Fine Arts	Master Level	Master Level Art Work Text
Marmara University	Institute of Fine Arts	Master Level	Master Level Thesis-Art Work Text
Yıldız Technical University	Art and Design Faculty	Master of Art and Design	Master Thesis

Hacettepe University	Institute of Fine Arts	Master of Fine Arts	Postgraduate Art Study Report
Gazi University	Institute of Fine Arts	Master	MS Thesis- Project

The table shows an interesting result: written outcomes of master level art students are titled with several names such as text, thesis, art work report, and project. The given titles are indicating the confusion. This is an important data because the issue of title is not something about just naming. This confusion continues also in working progress and style. Yet there is one certain thing: every university has its own thesis writing guidelines. But these guides usually explain which font should be used, what the paper format is, how the referencing system is etc. Context of the thesis is still stays vague. This vague context problem is the first problem.

Comparison of Theses According to Contexts

In this section of the study 5 theses were examined considering their contexts. All the thesis were gathered from Council of Higher Education Thesis Center. Departments were considered in the theses selection and painting and sculpture departments' theses were chosen. After examination of the theses a chart is prepared.



Tez No	İndirme	Tez Künye	Durumu
410464		Vahşi kadın arketipi ve heykel / Wild woman archetype and sculpture Yazar:GÜLEN EREN DURAN Danışman: PROF. NESLİHAN PALA Yer Bilgisi: Mimar Sinan Güzel Sanatlar Üniversitesi / Güzel Sanatlar Enstitüsü / Heykel Anasanat Dalı / Heykel Sanat Dalı Konu:Güzel Sanatlar = Fine Arts Dizin:Arketip = Archetype ; Heykel = Sculpture ; Heykel sanatı = Sculpture art ; Heykel tasarımı = Sculpture design ; Kadınlar = Women ; Sansüalizm = Sensationalism	Onaylandı Yüksek Lisans Türkçe 2015 106 s.

"Vahşi Kadın Arketipi ve Heykel" isimli bu çalışmada, tarih boyunca insanın doğayla ilişkisinde kadın imgelerinin oluşumu ve süreç içerisinde bu imgelerin değişim ve dönüşümü irdelenerek, heykele yansıyan biçim ve içerik yorumları ele alınmıştır. Yirminci yüzyıl ve sonrası heykeltıraşlar üzerinden bu bağlantıların süregelişi çalışmaya dâhil edilmiştir. Birinci bölümde; alt başlıklar altında arketip kavramının açılımları ile bilinçaltı ve kolektif bilinçdışı açıklanmıştır. Bununla birlikte, kadının tarihteki konumlandırılışı ve ona yüklenen anlamlar, tarih öncesi bulgular, antropolojik savlar ve Anadolu'da Ana Tanrıça kültünün yaşandığı kültürler, mitoloji kapsam dışında kalacak şekilde sınırlandırılıp incelenerek kadın arketipleri ve forma yansımaları gözlemlenmiştir. İkinci bölümde; masallar ve içgüdüsel olanın kolektif bilinçdışı ile ilişkisi belirtilmiştir. Arketip olarak kabul edilen masallardan verilen örnekler ile masalın yarattığı çağrışımla bağdaşan heykeller, sanatçısının izleğiyle ilgili bilgiler aracılığıyla açıklanmıştır. İçgüdünün benlik ve bilinçdışı kodlamalarla bağı ve bu bağın sanatsal tavra ve imgeleme katkısı seçilen heykeltıraşlar ve eserleri ile ikinci bölümün alt başlıklarında irdelenmiştir. Üçüncü bölümde; psikanalitik okumaların, tarih öncesinden günümüze uygarlık algısındaki kadın kimliğinin, arkaik birikimlerimizin, semboller ve arketiplerin kendi üretimime etkisi gösterilmiştir. Anahtar Kelimeler: Arketip, Kadın, Heykel, Duyumsama, İçgüdü

This study, "Wild Woman Archetype and Sculpture", interrogates the formation of female imageries within the framework of the relationship between human and nature throughout history. The changes within and the transformation of female imageries are examined to discuss their impacts on sculpture in terms of forms and context readings. A discussion of the works of sculptors from twentieth century and later is also included in order to show the continuity of these bonds. The first chapter elaborates on the notions of archetype, the subconscious and the collective unconscious in subheadings. In addition to this; by focusing on situating of the woman in history, the meanings attributed to it, prehistorical findings, anthropologic arguments and the cultures with Mother Goddess cult in Anatolia have been examined excluding mythology; thus the reflections on woman archetypes and form are observed. In the second chapter; the relationship of fairytales and instincts with collective unconscious is pointed out. The sculptures complying fairytale associations have been explained in company with the information about the theme of the artists, using the examples from fairytales which are accepted as archetypes. The link between the instinct and the unconscious codes is also debated to reflect on the contribution of this link to the artistic attitude and imagination. The third chapter aims to demonstrate the effects of psychoanalytic readings, the perception of female identity from prehistoric times till today and, of our archaic accumulations, symbols and archetypes on my own production. Keywords: Archetype, Woman, Sculpture, Sensation, Instinct

Figure 1: Gülen Eren Duran's Thesis Abstract and Other Information

The first selected thesis was written by Gulen Eren Duran at Mimar Sinan Fine Arts University in 2015 in the Department of Sculpture. As it is seen from the abstract below the thesis starts with literature search, and continues with the explanation of important concepts such as persona, anima, animus. Then the writer refers to historical documentation and comes to 20th Century women sculpture artists. Last chapter covers writer Gulen Eren Duran's art works. In this chapter she starts with a general explanation about her works and after that explains selected works from a formalist perspective and justifies the use of forms, symbols and her emotional condition without being too emotional. At the end of the thesis there is a short conclusion part, in which she summarizes the thesis. The first chapter, which is about wild women archetypes during history and examples covers the pages between 4-34 and second chapter on fairytales, instincts and sculpture covers the pages between 39-73 and last chapter on Gulen Eren Duran's sculptures covers the pages between 77-85. (Duran, 2015).

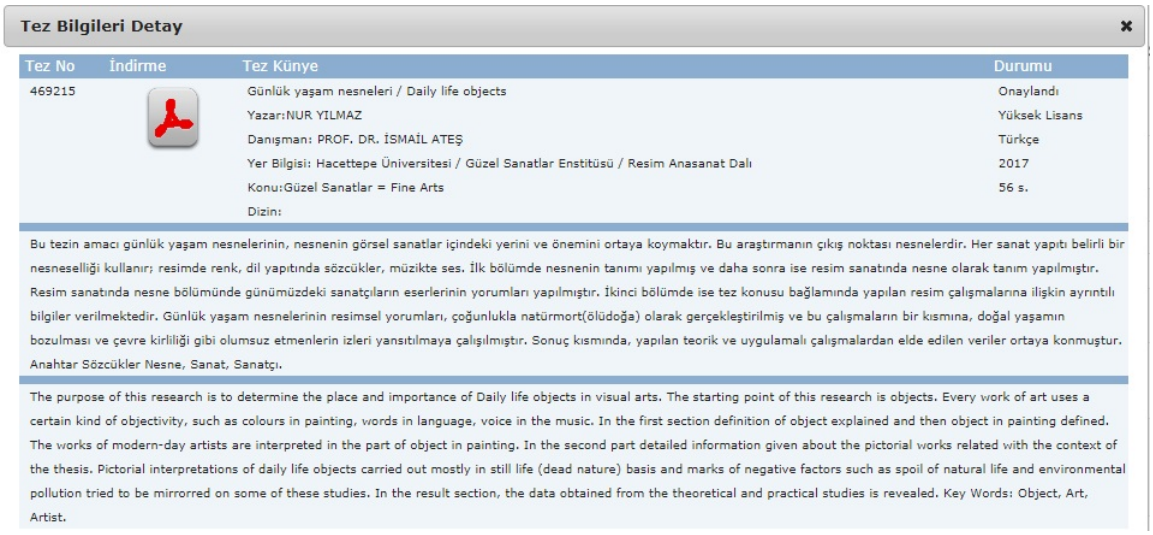
Tez No	İndirme	Tez Künye	Durumu
438187		Heykel sanatında üç boyutlu baskı teknolojilerinin kullanımı / The use of 3d printing technologies in the art of sculpture	Onaylandı
		Yazar:OZAN UYGAN	Yüksek
		Danışman: PROF. RAHMİ ATALAY	Lisans
		Yer Bilgisi: Anadolu Üniversitesi / Güzel Sanatlar Enstitüsü / Heykel Anasanat Dalı	Türkçe
		Konu:Güzel Sanatlar = Fine Arts	2016
		Dizin:Baskı teknikleri = Printing techniques ; Heykel = Sculpture ; Heykel sanatı = Sculpture art ; Üç boyutlu teknoloji = Three dimensional technology ; Üç boyutlu yazıcı = Three dimensional printer	71 s.

Heykel Sanatı tarih öncesi çağlardan itibaren üretim tekniklerinin dönemlere uygun olarak değiştiği aşamalara sahiptir. Zaman içerisinde değişen ve evrimleşen teknikler, hey-kelin tasarım ve yapılma sürecine etki etmektedir. Tekniklerde ve kullanılan malzemelerde yaşanan en büyük değişiklikler, Antik Yunan döneminde ve Sanayi devrimi sonrasında oluşan toplum düzeninde sanat kavramının özerkleşmesinden sonra yaşanan Modernizm döneminde gerçekleşmiştir. Sanayi devriminden sonra üretim sistemlerinin de-ğişmesi ve 19. Yüzyıl'dan itibaren yaşanan makineleşme, 20. Yüzyıl'daki teknolojik gelişmelere temel oluşturmuştur. 1970'li yıllarda üç boyutlu yazıcıların ortaya çıkışı ve 2000'li yıllarda ticarileşip insan yaşamına adapte olmaya başlaması ile birlikte heykel sanatında kullanımlarının görülmesi tarihsel süreçte heykele eklemlenen tekniklerin en sonuncusu olarak göze çarpmaktadır. Bu araştırma kapsamında, üç boyutlu baskı teknolojilerinin heykel sanatında tasarım, üretim tekniklerine etkileri sanatçıların eserleri üzerinden sorgulanmaktadır.

The Art of Sculpture has phases that production techniques have changed since prehisto-ric times. Techniques those changed and evolved during time effects the sculptures design and making process. Major changes of techniques and materials have happened in Ancient Greece and Modernizm era after self determination of the term of art after Industrial Revolution. Changes of production system after Industrial Revolution and mechanization since 19th century made the ground for technological developments in 20th century. With Invention of three dimensional printers during 1970's and their commercialization in human life during 2000's, their uses in Sculpture art seemed the last technique adaptation during historical process. In this research, effects of 3D printing Technologies on design, production techniques of the art of sculpture will be examined with the help of artists works.

Figure 2: Ozan Uygan's Thesis Abstract and Other Information

The second thesis is Ozan Uygan`s master thesis about ` The Use of 3D Printing Technologies in the Art of Sculpture` written in 2016, at Anadolu University under the Department of Sculpture like Gulen Eren Duran. The following structure is observed in this thesis: In the first chapter he writes the relation between production techniques and sculpture and its effect on design and making process of sculpture between the pages 3-18, in the second chapter he writes about the 3D Printing Technologies between the pages 19-36 and in the third chapter he refers to artists who uses 3D Printing Technologies from current art scene. The thesis ends with a short conclusion (Uygan, 2016).Unlike Gulen Eren Duran`s last chapter, Ozan Uygan`s master thesis does not refer to his artistic production. This is the main difference between two theses.



Tez Bilgileri Detay

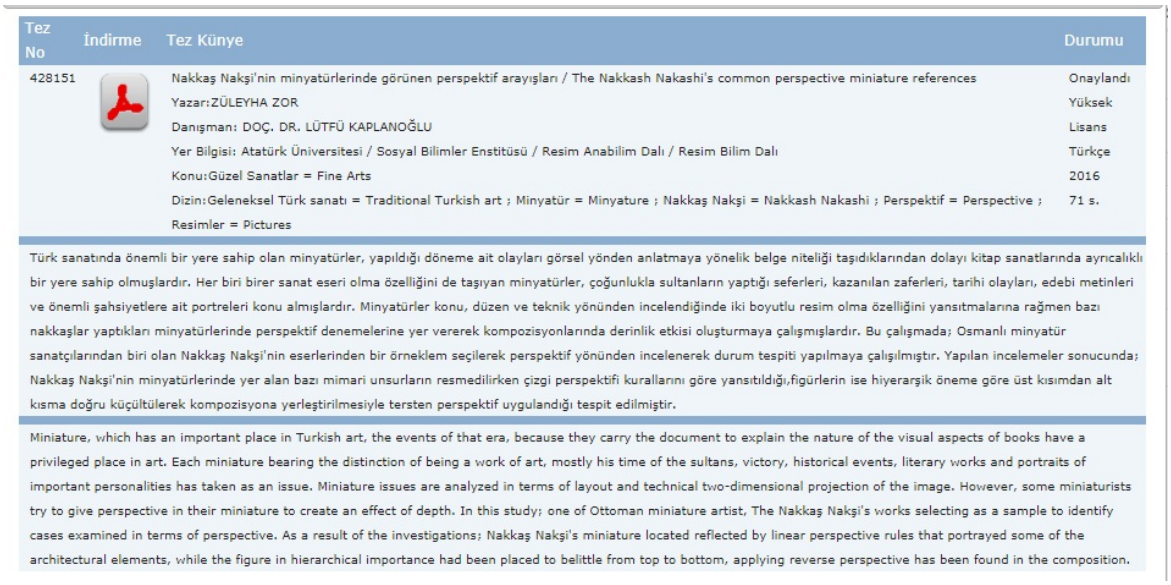
Tez No	İndirme	Tez Künye	Durumu
469215		Günlük yaşam nesneleri / Daily life objects	Onaylandı
		Yazar:NUR YILMAZ	Yüksek Lisans
		Danışman: PROF. DR. İSMAİL ATEŞ	Türkçe
		Yer Bilgisi: Hacettepe Üniversitesi / Güzel Sanatlar Enstitüsü / Resim Anasanat Dalı	2017
		Konu:Güzel Sanatlar = Fine Arts	56 s.
		Dizin:	

Bu tezin amacı günlük yaşam nesnelerinin, nesnenin görsel sanatlar içindeki yerini ve önemini ortaya koymaktır. Bu araştırmanın çıkış noktası nesnelerdir. Her sanat yapıtı belirli bir nesneselliği kullanır; resimde renk, dil yapıtında sözcükler, müzikte ses. İlk bölümde nesnenin tanımı yapılmış ve daha sonra ise resim sanatında nesne olarak tanım yapılmıştır. Resim sanatında nesne bölümünde günümüzdeki sanatçıların eserlerinin yorumları yapılmıştır. İkinci bölümde ise tez konusu bağlamında yapılan resim çalışmalarına ilişkin ayrıntılı bilgiler verilmektedir. Günlük yaşam nesnelerinin resimsel yorumları, çoğunlukla natürmort(ölüdoğa) olarak gerçekleştirilmiş ve bu çalışmaların bir kısmına, doğal yaşamın bozulması ve çevre kirliliği gibi olumsuz etmenlerin izleri yansıtılmaya çalışılmıştır. Sonuç kısmında, yapılan teorik ve uygulamalı çalışmalardan elde edilen veriler ortaya konmuştur. Anahtar Sözcükler Nesne, Sanat, Sanatçı.

The purpose of this research is to determine the place and importance of Daily life objects in visual arts. The starting point of this research is objects. Every work of art uses a certain kind of objectivity, such as colours in painting, words in language, voice in the music. In the first section definition of object explained and then object in painting defined. The works of modern-day artists are interpreted in the part of object in painting. In the second part detailed information given about the pictorial works related with the context of the thesis. Pictorial interpretations of daily life objects carried out mostly in still life (dead nature) basis and marks of negative factors such as spoil of natural life and environmental pollution tried to be mirrorred on some of these studies. In the result section, the data obtained from the theoretical and practical studies is revealed. Key Words: Object, Art, Artist.

Figure 3: Nur Yılmaz's Thesis Abstract and Other Information

The third thesis was written by Nur Yılmaz, in 2017 at Hacettepe University Institute of Fine Arts, under Painting Department. The thesis starts with the definition of the object and continues with further elaboration on art object. This is what the first chapter consists of. And Nur Yılmaz refers to artists from modern and contemporary area. Unlike two previous theses, Nur Yılmaz does not refer to other artists in the second chapter. In the second chapter she writes about her art works, explains the works one by one. In the last chapter, as a conclusion, she writes about her learning outcomes especially in practical artistic area. Considering this feature, Nur Yılmaz' thesis has a similar structure to Gülen Eren Duran's thesis. (Yılmaz, 2017).



Tez No	İndirme	Tez Künye	Durumu
428151		Nakkaş Nakşi'nin minyatürlerinde görünen perspektif arayışları / The Nakkash Nakashi's common perspective miniature references	Onaylandı
		Yazar:ZÜLEYHA ZOR	Yüksek
		Danışman: DOÇ. DR. LÜTFÜ KAPLANOĞLU	Lisans
		Yer Bilgisi: Atatürk Üniversitesi / Sosyal Bilimler Enstitüsü / Resim Anabilim Dalı / Resim Bilim Dalı	Türkçe
		Konu:Güzel Sanatlar = Fine Arts	2016
		Dizin:Geleneksel Türk sanatı = Traditional Turkish art ; Minyatür = Minyature ; Nakkaş Nakşi = Nakkash Nakashi ; Perspektif = Perspective ; Resimler = Pictures	71 s.

Türk sanatında önemli bir yere sahip olan minyatürler, yapıldığı döneme ait olayları görsel yönden anlatmaya yönelik belge niteliği taşıdıklarından dolayı kitap sanatlarında ayrıcalıklı bir yere sahip olmuşlardır. Her biri birer sanat eseri olma özelliğini de taşıyan minyatürler, çoğunlukla sultanların yaptığı seferleri, kazanılan zaferleri, tarihi olayları, edebi metinleri ve önemli şahsiyetlere ait portreleri konu almışlardır. Minyatürler konu, düzen ve teknik yönünden incelendiğinde iki boyutlu resim olma özelliğini yansıtmalarına rağmen bazı nakkaşlar yaptıkları minyatürlerinde perspektif denemelerine yer vererek kompozisyonlarında derinlik etkisi oluşturmaya çalışmışlardır. Bu çalışmada; Osmanlı minyatür sanatçılarından biri olan Nakkaş Nakşi'nin eserlerinden bir örneklem seçilerek perspektif yönünden incelenerek durum tespiti yapılmaya çalışılmıştır. Yapılan incelemeler sonucunda; Nakkaş Nakşi'nin minyatürlerinde yer alan bazı mimari unsurların resmedilirken çizgi perspektifi kurallarını göre yansıtıldığı,figürlerin ise hiyerarşik öneme göre üst kısımdan alt kısma doğru küçültülerek kompozisyona yerleştirilmesiyle tersten perspektif uygulandığı tespit edilmiştir.

Miniature, which has an important place in Turkish art, the events of that era, because they carry the document to explain the nature of the visual aspects of books have a privileged place in art. Each miniature bearing the distinction of being a work of art, mostly his time of the sultans, victory, historical events, literary works and portraits of important personalities has taken as an issue. Miniature issues are analyzed in terms of layout and technical two-dimensional projection of the image. However, some miniaturists try to give perspective in their miniature to create an effect of depth. In this study; one of Ottoman miniature artist, The Nakkaş Nakşi's works selecting as a sample to identify cases examined in terms of perspective. As a result of the investigations; Nakkaş Nakşi's miniature located reflected by linear perspective rules that portrayed some of the architectural elements, while the figure in hierarchical importance had been placed to belittle from top to bottom, applying reverse perspective has been found in the composition.

Figure 4: Züleyha Zor's Thesis Abstract and Other Information

The fourth thesis was chosen from Ataturk University, Painting Department. Writer of the thesis is Züleyha Zor, starts with elaborating on the importance and aims of the topic like 3 previous theses. Yet unlike previous theses, Zor's thesis also has a material and method part. The first chapter of the thesis is about the term miniature, conceptual explanations of it and its practical usage in the historical context. In the second chapter, Züleyha Zor explains second important term of the thesis which is perspective. In the third chapter she writes about the selected artist Nakkas Naksi, his life and examines his works according to data given in the first and second chapter of the thesis. In the conclusion part she makes a general overview. Her thesis is similar to Ozan Uygan's thesis in the sense that none of the writers refer to their own art works. (Zor, 2016)

Tez No	İndirme	Tez Künye	Durumu
261483		Sürrealizm ve rüya / Surrealizm and dream	Onaylandı
		Yazar:PINAR AKARSU	Yüksek Lisans
		Danışman: DOÇ. DR. RÜÇHAN ŞAHİNOĞLU	Türkçe
		Yer Bilgisi: Marmara Üniversitesi / Güzel Sanatlar Enstitüsü / Resim Bölümü / Güzel Sanatlar Anabilim Dalı / Resim Bilim Dalı	2010
		Konu:Güzel Sanatlar = Fine Arts	222 s.
		Dizin:Rüya = Dream ; Sürrealizm = Surrealism	

?Bu çalışma, Sürrealizmi ve XX. Yüzyılın başında Endüstri Devrimiyle değişen insanın iç dünyasını, sosyoloji, felsefe ve psikoloji bilim dallarının rehberliğinde incelemiş ve bu akımın kendine yeni bir gerçeklik yarattığını kanıtlamaktadır.?İnsanın kendi içine kapanması birçok ruhsal problemi de beraberinde getirdi. Freud, psikolojik dünyanın keşfi için rüyaları, dil sürçmelerini, psikanalizi bilimsel bir platforma taşıyarak, bilinçaltını konuşturmayı denemiştir. Rüya yorumu psikanalizde, rüyaların açık içeriğindeki sembollerden hareketle kişinin bilinçdışı arzu, dürtü ve çatışmalarını açığa çıkaran bir tekniktir. Rüyalar bilinçdışına açılan ana kapıdır. Rüya, gerçeğin ve bilinçaltında yatan duygu ve düşüncelerin toplandığı verimli bir kaynaktır. Kaynağını, bilinçaltına itilen korku, kıstırılmışlık duygusu ve bunu kırma isteği oluşturmaktadır.?Sürrealist sanatçılar, burjuva sınıfının yaslandığı ve kışkırttığı maddiyatçılık, akılcılık, işlevsellik ve bunların üzerindeki süsleyici örtüler gibi duran ahlak, estetik ve sanat gibi değerlere karşıydılar. Kendilerine ve topluma ?yabancılaşan? sanatçılar, toplum dışı kalır ve yeni bir çıkış yolu ararlar.?Birçok Sürrealist ressam, düş tekniklerini resimlerinin yanı sıra, resmin dışındaki alanlarda da sergilemiştir. Sanatçılar resim, heykel, film yapmakla kalmayıp ?simgesel işlevi olan nesneler? yaratmışlardır. Bu nesneler düşlerin içe çevrilmesini aşmış ve daha yüksek bir düzeyde ?hayal ile gerçeği? kaynaştırmayı başarmıştır.

?This work analyzed the surrealism, the internal world of the man which changes with the industrial revolution of the beginning of the XXth century, in the light of sosciologie, philosophy and psychology; it proved that this current built up to itself a new reality.?The isolation of the man took numerous psychological problems. Freud tried to make the subconscious speak for the discovery of the psychological world by bringing dreams, the slips of the tongue and psychoanalyses on a scientific platform.?The interpretation of dreams in psychoanalyses is a technique which brings to the light the unconscious desires, impulses and conflicts from the symbols openly contained in dreams.?Dreams are doors opened to the unconsciousness.?The dream is a fertile source where meet the reality as well as the feelings and the thoughts are founded under the subconscious. Its origin is formed by the fear, the feeling to be trapped and the will to get rid of it.?The surrealist artists were against values as the materialism, the rationalism, the utilitarianism which support the bourgeoisie and the values which decorated them as the morality, the aesthetics and the art.?The artists who become strangers to each other and to the society are excluded from the society and look for a new way of release.?Numerous surrealist painters exposed their techniques of dreams not only in their painting. Artists did not content with making paintings, statues or films, but they created "objects having a symbolic function". These objects exceeded the introspection of the dreams and managed to merge "the dream and the reality" on a higher level.

Figure 5: Pınar Akarsu's Thesis Abstract and Other Information

The last thesis is Pınar Akarsu's thesis written in 2010 at Marmara University Painting Science Major. In her thesis Pınar Akarsu's subject is the relation between Surrealism and Dream. In the first chapter she makes a very detailed research. Unlike 4 previous theses, her thesis refers to many disciplines including philosophy, sociology, cinema, theater, architecture, psychology, and art history. In previous examples, the theoretical background provided in the

theses usually relies on art (especially visual arts), and art history. In the first and second chapter she investigates one of her main themes “surrealism” and in the second chapter she investigates second main theme “dream”. In the third chapter, Pınar Akarsu examines the relationship between Surrealism and dream by adding examples from Surrealist art. In the conclusion part, she writes about why dream and surrealism are related and important subject considering modern individual's condition and how art functions in this context. In this thesis, again we do not see a part showing her art works like Ozan Uygan and Zuleyha Zor and unlike Nur Yılmaz and Gulen Eren Duran. She also includes a glossary of terms section in he thesis, which is unique among the five theses. (Akarsu, 2010).

As a result of the examination of five theses, a chart was designed by considering their common and distinctive points. The outcome of the research shows that each university, faculty and department in the fine arts area has its own style.

Table 2. Theses Context Analysis

Writer	Thesis Title	Year	Total Pages	Conceptual, terminological part/Historical background	Art historical examples / Examples from current artists	Writer` s Art Works
Gülen Eren Duran	Wild Woman Archetype and Sculpture	2015	106	Pages 4-34	Pages 39-73	Pages 77-85
Ozan Uygan	The Use of 3D Printing Technologies in the Art of Sculpture	2016	71	3-18 / 19-36	17-52	-
Nur Yılmaz	Daily life objects	2017	56	1-2	3-18	19-32
Züleyha Zor	The Nakkash Nakkashi’s Common Perspective Miniature References	2016	67	3-7 / 18-28	29-56	-
Pınar Akarsu	Surrealism and Dream	210	222	1-102 / 103-149	150-192	-

Difficulties in Thesis Process Resulting from Student Tendencies

Students' tendencies are also important in thesis writing process, students’ nature might be a reflection of art’s nature. To start with an area of fine arts might be reasonable. Fine arts area is a very distinctive from other scientific areas. Knowledge of the art area is not a cumulative and chronological one. And every artist/writer should put her/his special topic to the forefront. The area of art is mainly intuitive, visual and imaginary. To explain it with words creates a weakness in expression. At this point the most important problem reveals itself: to define a research question or thesis problem is really difficult. From this point we can jump to student tendencies. Due to the features of fine arts students usually cannot define their thesis problem. And also since fine arts faculties provide more practice focused education, students cannot capture the keen relationship between theoretical and practical field.

Fine arts students’ reading rate is not high and their educational background is not sufficient for conducting research. These factors also contribute to the problem. In these conditions, it is hard to have development in research area in two years graduate program.

The era we live in and its facilities creates problems on student profile as wel. Since digital age is a visual age, students prefer to use digital facilities instead of printed materials such as art catalogs and books. Knowledge coming through internet makes the students’ knowledge superficial.

CONCLUSIONS

In order to reach a conclusion, all the parties involved in shaping the writing of the theses, that of students, institutions and advisors should be considered. It should be taken account that there is no custom solutions, thesis style may vary from student to student. Each student’s process might need some unique decisions.

Institutions should put their aim clearly whether the aim of the faculty is to train artists or artists/academicians.

Art students in the fine art faculties graduate level are the future academics potentially. Thus they should be aware of recent art, art history, and art theory. Thus to have a theoretical part with a conceptual and art historical

background in their theses would be necessary. On the other hand, art produce a special kind of knowledge. This knowledge reveals itself through art work. This special knowledge should be revealed and dispersed. Thus, a thesis advisor should be careful about not destroying personal knowledge and tendencies of the art student. As a result, a thesis should be designed in a very well balanced way including both theory and knowledge in general sense and personnel artistic knowledge.

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EDUCATIONAL DATA MINING APPLICATION FOR INCREASING QUALITY IN ENGINEERING EDUCATION

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ABSTRACT
The laboratory courses, which have an important role in engineering education, allow students to transfer theoretical knowledge to practice and realize the differences that may arise between theory and practice. Analyzing the performance of the learners in these lectures and determining the factors affecting student performance is important in terms of increasing the success. In order to improve the quality of education, these factors need to be interpreted well and educational environments must be structured accordingly. Recently, data mining based on educational environments has been widely used in determining factors affecting student performance. Data mining facilitates operations on data to be collected from educational environments. In this respect, the use of outputs from educational data mining in preparation process for programs to improve the quality of engineering education such as the Association for Evaluation and Accreditation of Engineering Programs (ENAEE) will provide beneficial results. In this study, educational data mining application was carried out to be used in the process of increasing qualifications in engineering education within the scope of ENAEE preparation. Data mining algorithms were applied on the laboratory data set created by the Karabulut et al. (2017). The results obtained are interpreted in terms of MÜDEK preparation process.
Keywords: Educational Data Mining, Laboratory Dataset, MÜDEK, Education Quality

INTRODUCTION

Engineering and technology are of great importance both in the developed and developing countries in terms of the economic and social development of the countries. In today's ever-changing world, new strategies should be developed in engineering education to educate engineers who provide positive contribution to the society. These strategies should include support for technical, personal and professional development, assessment and evaluation, monitoring and control of factors that affect student performance (Memon et al., 2009). However, considering the factors that affect students' success and learning behaviors can be a complicated problem. This problem is also described in the literature as the "1000-factor problem". There are a number of factors that affect the academic performance of students. These; social, cultural, familial, demographic, educational infrastructure, socio-economic status, psychological profile and academic progress (Shaaleena and Paul, 2015; Desai et al., 2016).

Different methods based on the analysis of student data are used in evaluating student performance. Today, data mining is one of the most commonly used methods to investigate previously unexplored information, patterns and relationships from the data set containing student information (Baradwaj and Pal, 2012). The use of data mining techniques can find out wide range of critical and preliminary information such as rules of association, classes and clusters (Yadav and Pal, 2012).

Outputs of data mining applications can be used by different members of the education system (Romero and Ventura, 2010). Data mining research findings and patterns can be used for developing their own learning behaviors by students. Also, educators can use them for identifying students at risk and planning appropriate guidance for this group, identifying and resolving common problems. Besides, managers can use results for developing effective education policy development by managers (Kabra and Bichkar, 2011).

Data mining requires a standardized approach in the conversion of problem areas to data mining tasks, appropriate data transformation, preparation, selection of data mining model, assessment of the effectiveness of the results, and experience reporting. CRISP-DM (CRoss Industry Standard Process for Data Mining) defines a process model that provides a systematic framework for conducting data mining projects independently of both the business sector and the technology used. The CRISP-DM process model makes large data mining projects less costly, more

reliable, more repeatable, more manageable and faster (Wirth and Hipp, 2000; Palaniappan and Awang, 2008). CRISP-DM consists of six main stages. These; determination of goal, understanding data preparation, modeling, evaluation, using / applying the results (Çınar and Arslan, 2008).

In this study, the academic performances of computer engineering students were analyzed by using classification methods. As a result of the application of data mining algorithms, it is thought that previously unexplored knowledge and patterns can be used to analyze student performance and to control critical factors affecting the performance of students. In addition to these, the educators can apply effective teaching approach, identify students at risk and use them in guidance areas. Besides, it is considered that the analysis results of the data set will contribute positively to the accreditation process such as MUDEK.

RELATED WORKS

In their study, Al-Radaideh et al. (2006) used ID3, C4.5 and Naive Bayes algorithms to evaluate the final performances of students taking C ++ programming course. The researchers have prepared 13 variable data sets in order to apply the data mining algorithms. The data set prepared in the study included the sociodemographic characteristics of the students, the characteristics of the educator and the performance of the student in the C ++ course. In the study, the CRISP-DM (Cross-Industry Standard Process for Data Mining) model, which is considered as the standard of data mining applications, is used. Data were analyzed using the WEKA (Waikato Environment for Knowledge Analysis) program.

Kabra and Bichkar (2011) conducted their studies to evaluate the academic performance of engineering students. They collected the data of 346 students at the entrance stage and analyzed the data mining algorithms with j48 (J4.5-Java Application) Decision Tree in order to predict students' academic performance at the end of the first year. The researchers gathered information on students' sociodemographic characteristics, contact information and past academic performance from the students and formed the study dataset. Data were analyzed by WEKA program. Of the 346 students in the study, 209 (60.46%) were correctly classified. In addition, it was determined that the most important factor affecting the academic success of the students was the entrance exam score.

In their study, Baradwaj and Pal (2012) performed a performance analysis with a data mining model by collecting the data of 50 students enrolled in graduate program in applied computer science. Past semester grade, Semester performance, homework performance, general proficiency, attendance to lectures, laboratory studies and final grade were included in the dataset used in the research. The researchers implemented ID3, ASSISTANT and C4.5 decision tree algorithms on the dataset.

Hajizadeh, and Ahmadzadeh (2014) used Turkey Student Evaluation data sets from the UCI (University of California, Department of Information and Computer Science-Machine Learning Repository) Machine Learning database. The researchers used the data mining techniques (Apriori) and Classification (REPTree) to examine the factors in the prevention of course repetition. The data were analyzed via the WEKA program.

Satyanarayana and Nuckowski (2016) used three different classification algorithms to evaluate the academic performances of students in the field of computer technology systems. These are; Decision Trees J48, Naive Bayes and Random Forest data mining algorithms. The researchers implemented the model on two separate sets of data. UCI Student Performance Data Set and New York City College of Technology CST Computer Introductory Course Data Set were used in the study. In addition, in order to identify effective associations on the performance of students in the study, Apriori, Filtered Associator and Tertius, which are rule-based algorithms, have been used.

In their study, Figueiredo et al. (2016) analyzed the effects of the methods applied in the chemistry laboratory on student motivation and learning behaviors with data mining algorithms. In the study 3447 students' information was collected by questionnaire method. The k-means clustering algorithm is applied on the data set via the WEKA program.

In their work, Desai et al (2016) gathered information from a 60-student web-based tool to profile the third-year students of computer engineering. The k-means clustering algorithm is used to profile the students.

Asif et al (2017) collected information from 210 students in order to evaluate the academic performance of the students enrolled in the information technology program. Data mining algorithms have been implemented through the RapidMiner program. Decision Trees, Nearest Neighborhood, Neural Networks, Naive Bayes, Random Forest algorithms were applied in the study and the results were compared in terms of classification accuracy.

In their study, Costa et al. (2017) formulated a data mining model in order to predict early probability of failure of students in the introduction to programming. The researchers applied the Naive Bayes, Decision Tree (J48), Multilayer Neural Network, SVM algorithms on the data, which consisted of information about students' sociodemographic characteristics and academic performances. Pentaho open-source software tool for preliminary analysis of data and WEKA program for data mining algorithms were used in the study. The researchers found that students with a likelihood of failure were approximately 50% to 80% correct from the first week after enrollment.

METHOD

In this study, the laboratory dataset created by Karabulut et al. (2017) to determine the factors that affect the student performance was used. This dataset contains data collected from students of Electronic Circuits and Electronic Circuits Laboratory in the Department of Computer Engineering. There are 57 attributes in the dataset and the dataset contains 140 records.

In study, 17 attributes were selected from the laboratory dataset and used in the study. Selected attributes are given in Table 1. The 17th attribute in the Table 1, which is called result, is set as the target attribute. This attribute refers to the status of the students' lecture success (values of *result*-P: passed, F: failed, NE: Not Enrolled)

Table 1. Selected attributes of laboratory dataset

#	Attribute name	Type
1	bYear	Numeric
2	sex	Binary
3	birthplace	Nominal
4	residence	Nominal
5	highSchool	Nominal
6	CGPA	Numeric
7	eduType	Binary
8	Physics1	Categorical
9	Physics2	Categorical
10	Math1	Categorical
11	Math2	Categorical
12	Electric	Categorical
13	reTakingNumber	Numeric
14	attandence	Numeric
15	labEnrollment	Categorical
16	labResult	Categorical
17	result	Categorical

There are missing values in some attributes in the laboratory dataset. Table 2 shows the attributes, which have missing value, with the missing value rates.

Table 2. Missing Values Rates of Attributes

Attribute Name	Rate of missing values
highSchool	26%
residence	1%
Physics1	1%
Physics2	1%
Math1	1%
Math2	1%
Electric	1%

In data preparation process, if the missing value rate is below a certain value, the corresponding records can be deleted. In addition, the missing values can be cleared with some operations. Generally, when missing data is cleared, mode operation is used for categorical variables and average operation is used for numerical variables. The Weka (Waikato Environment for Knowledge Analysis) Program used in this study is performing the missing values clearing process.

The classification process has been applied on the dataset that has become ready by clearing the missing values. There are various methods of classification in data mining. In this study, 4 of these methods are used and the classification methods used are;

- J48 Decision Tree
- Naive Bayes
- Multilayer Perceptron
- Zero R

One of the most common programs used in data mining applications is Weka. The Weka program was used to apply the classification methods specified in this study. This program provides convenience in analyzing data and applying various algorithms.

FINDINGS

Classification process was applied on the laboratory dataset with the help of Weka program. Multilayer Perceptron, Naive Bayes, J48 Decision Tree and Zero R classification methods are used for classification. In addition, pruning operation was applied on J48 Decision Tree. The results obtained are given in Table 3.

Table 3. Accuracy rates of applied classification methods

Classification Method	**Accuracy**
Pruned J48 Decision Tree	%80
Multilayer Perceptron	%76.42
Naive Bayes	%73.57
J48 Decision Tree	%72
Zero R	%62.85

When the Table 3 is examined, it is seen that the best result is obtained with the help of Pruned J48 Decision Tree. When the J48 decision tree is applied, the number of leaves is 128 and the size of the tree is 141. Pruning operation reduced the number of leaves to 5 and the size of the tree to 8. The obtained pruned J48 decision tree is given in Figure 1.

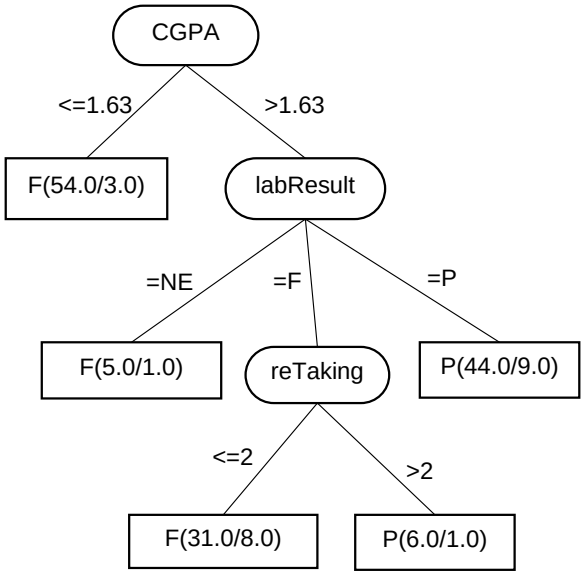

Figure 1: Pruned J48 Decision Tree

Examining Figure 1, it can be seen that a simpler and more interpretable tree is obtained with pruning operation. In addition, pruning increased the classification success. When all the methods applied are evaluated, it is seen that Pruned J48 Decision tree has the highest accuracy rate.

CONCLUSIONS

In this study, the classification process was performed on the laboratory data set. For classification, Multilayer Perceptron, Naive Bayes, J48 Decision Tree and Zero R classification methods are used. These classification methods are compared in terms of accuracy rate. Pruned J48 Decision Tree has the highest accuracy rate and is important in terms of being able to provide interpretation to educators and researchers. According to pruned J48 tree results; it is seen that CGPA, labResult and reTaking have been found to have more influence on students' performance.

The determination, evaluation and monitoring of the program and course outputs and the management of the continuous improvement process, which are among the most important criteria of the MÜDEK accreditation program, require considerable time and effort by educators and managers. For this reason, it is thought that the obtained records and results from the educational data mining process facilitate the implementation of the procedures related to the MÜDEK criteria which are mentioned above. Also, all information related to student performance gained by educational data mining provide significant contributions to accreditation process. As the final results of all activities related to determining and monitoring the factors affecting student performance with educational data mining applications have a key role in increasing the quality of engineering education.

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ENHANCING QUALITY IN HIGHER EDUCATION THROUGH INTERNATIONAL COLLABORATION: PROJECT MENTORESS

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[1] **MENTORESS** (Maritime Education Network to Orient and Retain (Women) for Efficient Seagoing Services) – (Erasmus + KA2 – 203 Strategic Partnerships for Higher Education)

ABSTRACT
Education and training are vital to the development and success of today's knowledge society and economy. The EU's strategy emphasizes countries working together and learning from each other and supports programs to realize this. To this end, Erasmus Programme, which is part of the European Commission's Education Programme, funds a wide range of actions to improve the quality of education and training systems. PRU (Piri Reis University) has been developing innovative MET (Maritime Education and Training) solutions since its foundation in 2008 under the EU Educational Programmes to create a culture of quality and value people. This paper intends to introduce a new EU Project planned to equip the women with complementary qualifications to cope with the hardships they face in maritime, which is a male-dominated multi cultural environment. The main objective of the project is to determine what can be done and how these can be integrated into leadership and management programmes at the universities.
Keywords: Higher education, Innovation, Research projects, Leadership and management, Women leaders

INTRODUCTION

Research is an effective means of underpinning further and higher education programmes, developing and motivating staff, establishing working relationship with industry and commerce and developing independent and self-learning while preparing students for the future (Albayrak and Ziarati, 2010).

Universities are the places where people are trained not only for their future professions but also for life. During their university education, people learn a lot of things related or not related with their chosen field of study. This process prepares them for their future and the more they are equipped with education and training necessary for the life the more successful they are likely to be. In this paper, we will introduce a study planned to equip the women with complementary qualifications to cope with the hardships they face in maritime, which is a male-dominated environment. Our main objective is what can be done and how these can be done to realize this aim at the universities.

Although it is a universally accepted fact that women and men can work at every job together, some jobs are male-dominated while some others are female-dominated. Each part has its own features to be preferred or not by a certain gender. In gender-dominated jobs, it is hard for the opposite gender to be accepted, succeed or excel.
In comparison, the situation of women working in male-dominated jobs is harder than that of man doing vice versa. Sometimes, due to historically ingrained attitudes toward women and established gender biases, some jobs are held by an overwhelmingly high percentage of men, making it difficult for women to advance, let alone break in. To a guy looking for a job, this isn't necessarily a bad thing (Gold, 2011).

Maritime shipping is an overwhelming means of allowing economic resources to be transported and hence a major facilitator for economic development worldwide. The global economy is built on integrated supply chains that feed components and other materials to users just before they are required and just in the right amounts. If the supply chains are disrupted, it will have repercussions around the world, profoundly affecting business confidence (Albayrak, 2007).

Safety of life at sea, the marine environment and over 90% of the world's trade depends on the professionalism and competence of seafarers. It has been reported that over 80% of accident and incidents are due to human error. A close investigation of casualty analyses particularly focusing on the causes of accidents clearly indicates that

standards are not applied correctly and when human factor issues are studied carefully there are omissions in the leadership and management education and training programmes received by the seafarers involved in accidents (Albayrak, 2011).

Today development of Maritime Education and Training (MET) system is a dynamic process under the pressure of rapidly improving maritime technology. Technological developments will almost certainly continue to create the potential for innovation in international shipping, but creating the conditions required to capitalize on the human resources is likely to demand new ways of thinking, new ways of working, and a new framework for understanding reality (Albayrak, 2011). Therefore integration of increasing number of women in the seagoing services has great importance for effective human resources management in the shipping sector.

While many businesses operated by women entrepreneurs are in traditionally female dominated occupations, women are also broadening their participation in non-traditional fields such as maritime businesses. Although there are only few women holding top management positions in the different sectors of the maritime industry, the world of maritime has significantly changed in the recent years and it is no longer all male (Albayrak et.al,2009).

However, shipping sector of the Maritime Business is still one of the jobs, which is male-dominated. Women make up only an estimated 2% of the world's seafaring workforce. Their low number, which is about 23,000 worldwide, means that women can be subject to discrimination and harassment (Women Seafarers, 2013).

Women can face discrimination even getting into seafaring work. In some countries, for example, maritime education and training institutions are not allowed to recruit women to nautical courses. Even once trained, they may have to face prejudice from ship owners who won't employ women. Once employed, women seafarers may also face lower pay even though they are doing work equivalent to that of male colleagues. Women may also be denied the facilities or equipment available to male workers, which is a form of discrimination. Although these are issues for many workers, they can be a particular problem if you are employed at sea, where you are isolated from family and friends and other sources of support (Women Seafarers, 2013).

On the other hand, the promotion of gender equality has been a goal of the United Nations (UN) and its specialized agencies, so policies to foster the advancement and empowerment of women have been on the agenda of several international organisations, governmental agencies and nongovernmental organisations in the last decades. As a result, the number of female alumni graduating from WMU (World Maritime University) and IMLI (International Maritime Law Institute) began to increase, and consequently these women began to take up positions as managers, administrators, policy advisers and educators in the maritime field worldwide (Frohold, Williams and Kitada, 2015).

Despite this, the fact that maritime is a male-dominated job is reflected in the student body of the maritime faculties at universities like all the faculties educating students for male-dominated jobs. The number of female students in maritime related departments is very low. There are 13 programs leading to bachelor degree and 27 programs leading to associate degree in maritime in 37 universities in Turkey as of 2015 figures (Oruç, 2015). To prove the small number of female cadets preferring these schools, a comparison between the number and percentage of female cadets and male cadets at maritime related departments in all the universities in 2016 is made. It is shown in Table 1 (YOK Lisans Atlası, 2016).

Table 1. Comparison of Male and Female Cadets in Maritime Related Departments (2016)

Department	Female		Male		Total	
	Number	%	Number	%	Number	%
Maritime Trans. Eng.	56	9	575	91	631	100
Marine Engineering	11	4	303	96	314	100
Maritime Business Management	134	29	329	71	463	100
Total	201	14	1207	86	1408	100

As seen in the table, the number of female cadets in maritime related departments of the universities is quite low. That means female cadets go from male-dominated classrooms to male-dominated work places. In other words, they start to experience the challenges of male-dominated settings as early as they start the university. The only difference is that they are worse in work life. In some cases, the hardships may be so unnerving and backbreaking

that female personnel change their mind about working onboard ships or if they start working they want to go to ashore units to work as soon as possible.
Some of these challenges female maritime personnel face are listed below:
1. Not being able to rise to the top positions;
2. Not getting the same salary as the men in the same positions;
3. Having to work more than the men to be promoted;
4. Being employed in restricted areas or in the areas they are not educated for;
5. Being given less on-the-job training opportunities;
6. Not having a strong network, as the men have;
7. Not having the solidarity and network due to the insufficient number of women in the sector, so not getting the benefits of them, as the men do;
8. Insufficient mentorship opportunities to integrate women into the field;
9. Not being able to perform organizational citizenship behaviours as much as men can, due to the fact that they are primary caregivers in the family; and
10. Suffering from work overloads and time management problems (Ozdemir and Albayrak, 2015).
As these challenges suggest female cadets should be ready to thrive in the men's world and it is clear that some measures should be taken to equip them with necessary qualifications to bear the demanding conditions of not only the life onboard a ship but also the hardships caused by working in a male-dominated job.

Purpose and Specific Aims
To this end a special project is designed with the contributions of four different countries, which are Turkey, Romania, Bulgaria and Poland. The purpose of the project is to design a syllabus and to import it to the Leadership and Management curriculum of maritime faculties to help prospective female staff cope with the hardships they are likely to encounter in sea going services and maritime jobs and to make them realize themselves to the full extend. The MENTORESS Project, approved by the Turkish National Agency as Project No: 2017-1-TR01-KA203-045739 under Erasmus + KA2 – 203 Strategic Partnerships for Higher Education 2017 – 2019, is accepted by the Turkish National Agency under the scope of Erasmus+ Key Action2 Strategic Partnerships.

The novelty of the project is determined by the innovative multi-dimensional approach of MENTORESS in terms of both strategic objectives and operational methods and procedures of implementation. The project encompasses a coherent array of activities that will converge to one activity, which is EMP homogenous as structure and implemented by the means of similar state-of-the-art pedagogical techniques and educational infrastructure.

First of all, the main objective of the 4 European maritime higher education institutions is to develop, test and implement an identical 1- semester extracurricular programme to give necessary leadership and intercultural communication skills to female cadets. This general objective is one of a kind at European level and will be a premiere for academies/universities that develop similar competencies through slightly different national (non-joint) study programmes. Female cadets are not given such an integrated education and training in any of the maritime higher institutions in European Union countries.

All partners are already employing high-level technologies of teaching and learning. Modern ICT equipment is proved by their laboratories, simulators, distance-learning networks, study facilities and the hardware on board the training ships, which are responding to the latest needs of the maritime industry. All these ICT means, which can be used by EMPs, allow also a smooth communication between the partners' team members and will make very feasible even virtual mobilities of teachers and students involved in the common training.

Another new feature of the MENTORESS project is to increase the number of women in maritime jobs and, by this way, to raise awareness for the presence of women on-board the ships, to create a women friendly atmosphere which requires to elaborate behaviours and language, to encourage appropriate behaviour amongst personnel and to foster good camaraderie. It will also provide the participants with awareness and cultural considerations with regard to gender.

On the other hand, more women aboard means more and different viewpoints about everything going on a ship, and the chance to respond more effectively to the ever changing maritime industry's requirements will increase. Sharing the same philosophy of designing the orientation programme, the same type of infrastructure for women concerning taking necessary precautions to make life easier for them on-board and similarly trained female personnel will generate a hard core of 4 European maritime institutions that can expand in the future its expertise to a larger EU area and beyond.

This is also the way the project will be sustainable and able to be developed even more in the future by approaching a more extended period for the training and education of both male and female cadets. Moreover, the proposed project can lay as the foundation for future programmes, bilaterally or in a larger consortium.

What's more, the project will act as a higher level synergy emerging from the bilateral educational and research joint activities developed so far by the partners, like various conferences, workshops, seminars and research cooperation. MENTORESS will take the current joint cooperation actions, which are performed, in pairs of partners to a higher, strategic level. For instance, all 4 partners have already performed projects, which consist of mutual exchanges of students and staff. All lessons learned from the previous cooperation among the 4 partners generated the necessity of this application and will serve as a solid background for the development and implementation of the project.

The activities intended to play a role in the creation of the curriculum are as follows:
1. A study on coping with the problems arising from diversity in maritime. The aim of this activity is to prepare women in maritime to tolerate hardships and problems arising from existence of people from different cultures onboard the ship. At the end of the study, it is aimed that the female cadets will be furnished with the skills to cope with the cultural differences in the international setting of a ship. The skills in question will be the basic ones that can be improved further. The cadets who get this training are expected to set role models to the other women in sector so that more women can be affected by the training given indirectly. On the other hand, the causes and the aspects of the diversity in maritime and gender gap caused by it in the maritime industry will be studied and conclusions about the methods aimed to increase the awareness and the integration of female maritime officers and managers will be drawn.
2. Workshops to make female cadets overcome gender equity problems for employment and problems encountered during duties: Participants will be furnished with some skills which may help the overcome the problems arising from gender difference. They will learn how to excel their rivals in a male dominated environment. They will prove they are as good as, may be better than, the men in the sector and be role models for the other women not only in maritime but also in other male-dominated sectors.
3. Creation of a Charter for Gender Equity for Maritime Professionals. The charter will consist of the collection studies and research papers that have analyzed the multi-dimensional aspects of women integration in the maritime professions. The charter will reveal measures for both maritime employees and employers, needed to bridge this gender gap in order to ease the access of female officers and managers onto the maritime labour market and naval defence occupations.
4. Creation of a "Gender Identity Management and Leadership in Maritime Professions" common syllabus. Based on the educational requirements, the partners will develop the "Gender Identity Management and Leadership in Maritime Professions" common syllabus.
5. Realization of MENTORESS Virtual Network. The dedicated portal will establish an efficient media for communication within the partners and most important, for dissemination of the Action's results. It will also include the educational references for the syllabus designed. Moreover, the virtual network will allow on-line courses and real-time meetings (conferences). It will also have a social media section.

METHOD

Various methods are intended to be used to achieve above mentioned-goals. For example the first aim will be realized through a workshop on adoption of creative strategies to effectively handle workplace diversity. Theoretical information on workplace along with diversity management implementation principles will be given. After good practice case studies from experts are studied, the students will be given case studies on diversity management in maritime. They will study in teams to see what succeeds and what fails in various situations. At the end of the workshop, the students will be given problem situations from the ships. They are required to solve out problems arising from different cultures' being together on a ship.

Another workshop will be held on gender equity problems for employment and problems encountered during duties. At the beginning of the workshop, theoretical information on gender equity and a summary of problems likely to arise from gender bias onboard ships will be given. Then interactive sessions on how to react to incidents encountered on ships concerning the issue will be carried out. After some experienced women in the field talk about the real life situations, case studies will be conducted and tips to cope with gender bias will be given.

Next step is the creation of a workshop on leadership and coping with social, cultural and practical obstacles including second generation gender bias. Like the previous ones, this workshop will start by giving theoretical information on the subject. Then, lectures on understanding value systems of all parties and lectures on real life experiences from seafarers will be given. At the end of the workshop, the participants will be given problem

situations from the ships. They are required to solve out problems arising from social, cultural and practical obstacles including second generation gender bias on a ship, using the knowledge they gained from the workshop.

The accumulated results of all these activities will be presented publicly within a maritime stakeholders environment (academia, shipping industry, maritime regulating authorities, national naval security and defence). Discussions about the results of the research papers and other related issues will bring added value to the conclusions regarding the integration of women in the maritime professions.

The last activity will be a workshop on integration of women in the maritime professions. At the beginning of this workshop, success stories of women seafares from past till today will be given and the features necessary to be successful are studied. Then, obstacles in achieving success and how to cope with them are discussed. Role models from merchant marine and navy are invited to talk about their experiences and give advices; then the cadets ask questions, if they have any. At the end of the workshop, case studies including multiple problems are given and studied. The final results of the workshop will be presented publicly within a maritime stakeholders environment (academia, shipping industry, maritime regulating authorities, national naval security and defence). Discussions about the results of the research papers and other related issues will bring added value to the conclusions regarding the integration of women in the maritime professions.

PROPOSED ACHIEVEMENTS

It shouldn't be forgotten that empowering women fuels thriving economies, spurs productivity and growth, and benefits every stakeholder in the global maritime community (Women in the maritime industry). That's why a great emphasis should be placed on gender balance at maritime jobs as well as all the other jobs.

Our first aim is to design a syllabus to enable the women in maritime to cope with the problems arising from diversity and help them overcome gender equity problems they are likely to encounter during their duty. We also aim to furnish them with leadership skills and skills to deal with social, cultural and practical obstacles including second generation gender bias.

Another objective we try to realize is to create a network among seafarers by mentoring or e-mentoring programs and providing role models for the cadets. In our project, we aim to train not only female cadets but male cadets, as well, to work hand in hand in a cooperative and productive setting.

In addition, we are going to create a charter for "Gender Equity for Maritime Professionals" and a syllabus for "Gender Identity Management and Leadership in Maritime Professions". Finally, we aim to realize MENTORESS virtual network.

After the end of the EU (European Union) funding and completion of the project's objectives, the syllabus and the Charter will be formally introduced within the new curricula they were designed for and presented for the upcoming accreditation of modernised study programmes by the national quality assurance agencies. Thus they will enter in force as formal planning document for conducting maritime education, so they will be self-sustainable, without any extra funding needs. By the contrary, taking the new and more effective syllabus and general gender equality policies in the maritime related occupations into account, the partnership foresees an increase of the interest from the maritime industry's side to assist financially the development of new maritime education and training facilities.

CONCLUSIONS

The number of women in the workforce is increasing day by day. The women are getting more and more interested in all kinds of jobs and male-dominated ones are no exception. There are a number of difficulties waiting for them in these occupations. The first of them derives from the fact that they have a lot of responsibilities at home; second, they have to eliminate the gender bias, whether seen or unseen, and third, they have to cope with the hardships of working in-male dominated areas and unwillingness to accommodate them in those occupations.

This project is designed to help them overcome the difficulties of working in a male-dominated workplace. What we aim to achieve with the project is treefold.

Furnishing female cadets with necessary qualifications to cope with the hardships they face because of gender in maritime.

To enable women in maritime work more effectively so that they can make positive contributions to the work force in maritime.

The last but not the least, it is hoped that the syllabus to be developed will be commonplace in the schools where women are prepared to work in male-dominated work places and this will give way to the women to realize their potential to the full extend and to contribute to the workforce in general, and to the welfare of the country and the world respectively.

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EXHIBITING PERSONAL ART PROJECTS AS A LEARNING ACTIVITY IN FINE ARTS STUDIES. SPECIES OF SPACES

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ABSTRACT
Species of Spaces aims to provide students of the subject Project Methodology. Space of the Fine Arts Degree with the tools they need to have a real experience that will help them to enter the profession and exercise the dynamics of teamwork: to engage in dialogue, take responsibility, fulfill tasks...The procedure consists of the preparation and realization of group exhibitions grouped according to themes in the Fine Art Exhibition Hall. By showing their works to the public (in exhibitions they design, organize, assemble and advertise) the acquired commitment increases, and a realistic view of the profession is facilitated. We verify how motivation and demand increase. Through this experience they put into practice a series of resources that would not be possible to exercise otherwise.
Keywords: Exhi,ition, Work Team, Professionalization, Art

INTRODUCTION

The cycle of student exhibitions "Especies de Espacios", carried out within the 3rd year subject Methodology of Space Projects, began in the 2011-2012 academic year. The title makes reference to the homonymous book of Georges Pérec, Species of spaces (Espèces d'espaces, Paris 1973 -1974). In this book, Pérec invites us to travel from one space to another, from the most private (the page, the bed, the room, the apartment, the building, the street and the neighborhood) to the public sphere (the city, the countryside, the country, Europe, the world and space), this approach being very relevant for the contents of the subject of Project Space Methodology, since the students' personal artistic projects vary from one sphere to another, according to their particular interests.

The exhibition cycle is proposed as a proposal that (1) prepares students for the world of work, enabling an experience close to the professional field, (2) poses a motivating challenge both personal and academic, and (3) puts into practice, also, transversal objectives, such as teamwork, having to dialogue and agree among them, assume responsibilities, fulfill tasks, etc.

The exhibition hall of the Fine Art Degree Building is reserved each course on the month of April, so that - at the end of February / beginning of March - a date is established in which ALL the students briefly expose the projects they are working on to others. The students attend to the explanations and characteristics of the projects of all the classmates, acting, each one of them as a curator: distributing the projects of the others in different group exhibitions according to the theme, the concept, the form, etc. A consensus is reached until all the students are satisfied with the group they are in. Thus, being part of a specific group depends on professional criteria and since the groups are formed they function professionally performing all the tasks to culminate in the exhibition (poster design, dissemination, assembly, catalog, etc.).

Aims

The cycle of exhibitions Spaces of Species has as general objectives that the students of 3rd year of

Fine Art Degree, in the subject Project Methodology. Space:
1. Experiment in a real context, closer to a future professionalization, the fact of exposing their artistic projects.
2. To raise a motivational challenge, both personal and academic.

Regarding the **specific objectives**, to implement transversal objectives such as:
1. Stimulate teamwork: have to dialogue and agree among themselves, assume responsibilities, fulfill tasks...
2. That the students listen, know and respect the projects of the classmates. Know how to express and communicate their own.

3. From there, they can act as curators / critics so that the exhibitions have more consistency and the projects strengthen each other.
4. Carry out all the necessary tasks to carry out the exhibitions (choice of title, poster design, dissemination, assembly, etc.).
5. Analyze the development in all its phases, as well as the final result.
6. Keep track of the whole process: interviews with the participants, attention to the public's feedback, the impact on the media, as well as the sharing, before, during and after the exhibitions...

Participants and exercise proposal
The participants are students of the subject Space Project Methodology (third course of the Fine Arts Degree, they are split in two groups).

The professors in charge of the complete development of the activity are Silvia Martí Marí and Rocío Garriga. The teaching action is developed through a follow-up - theoretical classes, workshop and group tutorials and customized.

The proposal of the Cycle of Species of Spaces exhibitions consists in the sharing of the projects in which each student is working from the beginning of the course to the rest of the classmates. From there, exhibition groups are established according to the nature, theme, focus, etc. of each one's personal artistic projects. A calendar of exhibitions is prepared as well as a general poster is designed and from there each group will be in charge of everything related to its exhibition (to determine a title among all, to elaborate the poster, the diffusion, etc.).

The development of the teaching activity in all its phases is analyzed, as well as the final result. There is, therefore, a continuous observation of the whole process.

METHOD - ACTIVITY
The methodology to carry out this proposal begins at the beginning of the course. To direct the personal projects that each student will develop according to their own interests and dynamics, the first thing is to be aware of their previous artistic career; thus, they have to make a dossier of their previous work and write a first artist statement. From there, with the contents that are developed in class (theoretical classes, group projects, readings, etc.) and with the follow-up of personal tutorials, each student develops his/her personal research, in addition to other contents of the course.

As already mentioned, the BBAA (Fine Art) exhibition hall is reserved each course on the month of April, and at the end of February / beginning of March the students briefly expose the projects in which they are working on the others. Everyone listens and takes notes of the characteristics of the projects of all the classmates.

As a result: they pay attention, they respect the work of the classmates, they have to understand it -without judging it-, understand the underlying topic, the formal approach, the way it will be mounted in the room, etc.

This way students participate in art projects and art analysis in different exhibition groups. The decisions have been discussed and carried out according to professional criteria, that is to say, artistic, according to the theme, the concept, the form, etc. A consensus will be reached until all the students are satisfied with the group in which they are.

The objective of this way of gathering them is for students to listen, know and respect the projects of their classmates; that they know, likewise, to express and communicate their own to others; so that the exhibitions have more consistency and the projects are strengthened among themselves.

As soon as the groups are formed they work professionally performing all the tasks to culminate in the exhibition (choice of title, design of the poster, dissemination of the exhibition, assembly / disassembly, preparation of the catalog, etc.).

The **innovative** features of the project are that:

1. There is no selection by the teachers (although obviously there is a constant guide) except the criterion that the students have been working and there has been a follow-up, so that, in principle, all the students

participate.

2. The topics of the exhibitions are not pre-determined, but grow organically, from the personal projects of the students, which are based on their own interests.

3. The students themselves would curate the exhibitions, having to contemplate the works of others with respect and interest.

4. The important thing is to go through the experience of exhibiting, in the most similar way as it would be to make an individual exhibition; so, although in a month there are between three and seven exhibitions, which sometimes last only three days. This allows, unlike other collective exhibitions of students, where they put some work -which they already have done- (in this sense, it is not the same to "leave" a work for others to assemble it), here there is enough space per person so that it allows to install and assemble the work in a more professional way and it is the students who have to carry it out together.

5. The students help each other and, in addition, they learn that what is important is the overall result of the exhibition (the route, the lighting, etc.), beyond just highlighting the particular work of each one.

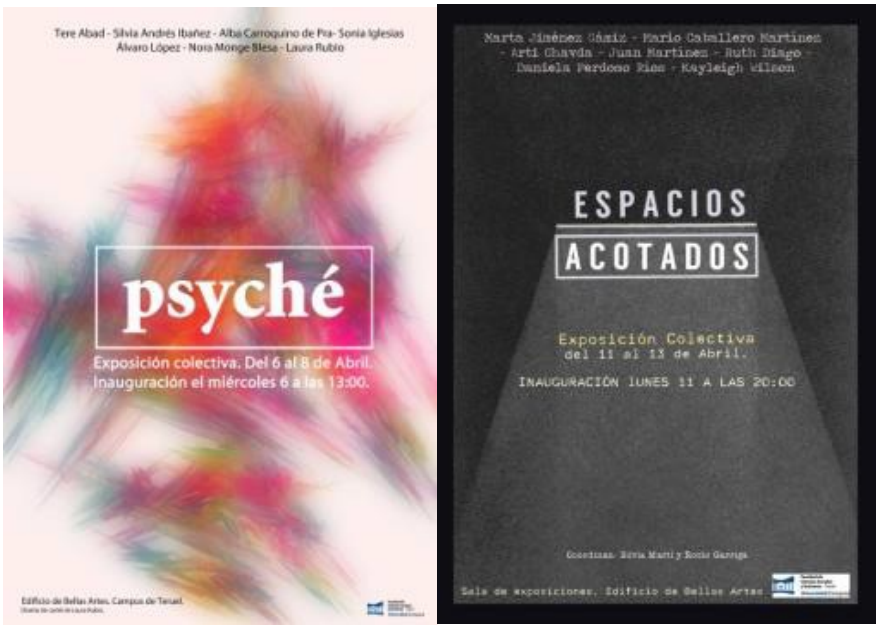
6. At the opening of the exhibition, a *tour* is established in which each student / artist presents his work to the attending public, which can ask anything to the artists themselves. This produces a double communication and enrichment: the students try to explain and synthesize the work they are doing, make it accessible to the spectator and the audience can have a more comprehensive approach to "contemporary" art so that learning takes place in both senses, in a cultural-formative action.

7. The work of the Diario de Teruel (local news paper) is grateful, since from the beginning it has kept track of the exhibitions, allowing the citizens of Teruel to approach the research carried out by the students in the Fine Arts Degree, and that motivates the students, by checking the social impact of their achievements and efforts.

FINDINGS - RESULTS

By showing their works to the public (in exhibitions that they themselves design, organize, assemble and disseminate) the acquired commitment increases, and a realistic vision of the profession is facilitated, both with the positive effects such as receiving media attention or from peers and public, as negative, such as the stress of the assemblies, the management of the ego / self-esteem, the relationships with the other partners, etc. Thus, the repercussion among the other students, in the press, etc., motivates and confronts them with more real situations such as the nerves of assembly, the situation of being "exposed" that involves doing and exposing work, understanding the repercussion of what one does/makes; to understand the difference between what they think their work "says" and what other people (public, colleagues, press, etc.) say it provokes on them.

The experience introduces them to the professional activity: choosing the title, making the poster, writing the room sheet, placing the posters, the lighting, the type of measurement in the assembly, the diffusion, the dismantling, the realization of the catalogs (write and reflect on the exhibition, on the assembly, make the CV, etc.).



Figures 1, 2: Posters of the different exhibitions *Species of Spaces 2015-2016.*

Figures 3, 4, 5: Posters of the different exhibitions. *Species of Spaces 2015-2016.*

Figure 6: Image of the presentation of each artist during the opening of the exhibition "Bounded Spaces". Species of Spaces 2015-2016. Exhibition hall of the Fine Arts Building. Campus of Teruel. Monday, April 11, 2016.

Figure 7: Image of the openning of the exhbition “ECOS”. Species of Spaces 2015-2016. Exhibition hall of the Fine Arts Building. Campus of Teruel. April, 15, 2016.


El Diario
Diario de Teruel
Cultura y sociedad
Psyché
Siete estudiantes del Bellas Artes en Teruel exploran la faceta psicológica del ser humano en una exposición inaugurada ayer y que podrá verse hasta el viernes
Diario de Teruel 35
CULTURA

Figure 8: News published in the Diario de Teruel. Thursday, April 7, 2016.


CULTURA
La serie Especies de Espacios continúa con la exposición 'Espacios acotados'
Siete alumnos de Bellas Artes participan en la segunda de las cinco muestras del ciclo

Figure 9: News published in the Diario de Teruel. Wednesday, April 13, 2016.

CONCLUSIONS

We check how motivation and demand increase thanks to this activity. Through experience, a series of resources are put into practice that it would not be possible to exercise in any other way. Even situations of stress that are experienced can become a reason for self-knowledge and maturation. The experience gained in the approach to the professional reality of the artists gives them a more realistic vision.

In the presentations / talks in which they present their works during the openings, a social-formative event is produced by having students from other courses as well as the general public that has direct access to the

explanations of the artists. And also the cultural life of the city is vitalized.

Through personalized monitoring, and the joint analysis of the "post-exhibition" experience in the classroom, the students show a great degree of satisfaction, and even in cases where there may have been frustrating results in various ways, the experience makes them mature, both in their artistic projects, as in the management of their emotional, social processes, etc. since a real experience always teaches irreplaceably.

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GENDER ROLE ON SERVICE QUALITY PERCEPTION ABOUT ONLINE EDUCATION

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ABSTRACT
Online learning (OL) has become an important part of university education. In the past OL was applied in different universities with different forms. With rapid technological developments OL gains a new format through Internet. Students can take courses online wherever they are geographically. It provides working people and adults possibility to enroll in a higher education institution without time and space barriers. Beginning from 1980s, Turkey adapted its education system to this new form through open education faculties in state universities. However as the number of foundation universities increase, OL became more common application in many programs at different levels. In this study, the effect of genders of students who enrolled in an online program on service quality perception in Turkey will be determined and analyzed through statistical analyses.

Keywords: Education, Service Marketing, Quality, Online Learning

INTRODUCTION

Measuring quality has always been an important issue, and a limited number of studies addressed this problem (Chapman and Henderson, 2010). Students' retention and their performance are influenced by the service quality provided by the higher education institutions (Kwek, Lau and Tan, 2010). Education quality is a complicated phenomenon influenced by different factors (Targamadze et al., 2010). A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kotler and Keller, 2012). According to Oldfield and Baron (2000), higher education can be seen as a pure service and educational services fall into the field of services marketing (Gruber et al., 2010). Service quality is defined as the result of the comparison that customers make between expectations about a service and perception of the way the service was delivered (Grönross, 1984). Grönross (1984), introduced the "perceived service quality model" which has three dimensions; technical quality, functional quality and image (Kang and James, 2004).

ONLINE LEARNING

Online learning is defined as "the acquisition of knowledge and skills through mediated information and instruction" (US Distance Learning Association, 2012). It is a type of educational mode that allows for flexibility in terms of mode and delivery. If there is a geographical separation between student and provider, OL will be an effective solution for both parts (Akeusola et al, 2011). Today online education exists worldwide and is applied to education at different levels (Sizoo et al, 2003). Besides online colleges, there are many traditional higher education institutions that offer their students both face-to-face and online courses together (Yener, 2013). This dual-mode system provides flexibility for working students (Ruth and Conners, 2012; Wu and Hwang, 2010). The global e-learning market is predicted to reach $107.3 billion by the year 2015. The US and Europe have 70% of market share of this market. Asia-Pacific region has the fastest growing market with 20% growth rate annually (Jose, 2010).

Universities can increase enrollment numbers, decrease the number of extra-hire teachers and offer a more flexible schedule to people with OL (Borstorff and Lowe, 2007). OL courses mean a reduced burden on university facilities (Ruth and Conners, 2012). Although OL has many benefits for all stakeholders, there are some disadvantages for students and instructors. With the lack of human contact and personal instruction, students feel themselves isolated and OL can seem cold and impersonal (Borstorff and Lowe, 2007). Course completion rates in online education courses are often lower than in traditional classes (Ruth and Conners, 2012). OL has become increasingly popular over the years. In the 2000-2001 academic periods, more than three million students were enrolled in OL courses in the U.S. (Güneş and Altıntaş, 2012). From the 1970s onwards, Asian governments established open universities to accommodate the large numbers of adults and school-leavers unable to gain entry to conventional universities. Thailand was the first country to open an open admissions university in 1971 and the following years, open universities were established in many Asian countries such as Iran, Turkey, India, China, Japan, Hong Kong, etc (Jung and Latchem, 2007). There are 114 public universities whereas 65 foundation universities and 6 foundations vocational school in Turkey (www.yok.gov.tr). Total number of the highest education institutions is 210 and their distribution can be seen in the Table 1. In Turkey, the first Open Education faculty was established by Anadolu University in 1982. After establishing foundation higher education institutions, the numbers of OL programs rapidly increased. Today most of the state universities have OL programs too, or are prepared to open.

Table 1. Number of Higher Education Institutions in Turkey

Type of Institution	**No.**
State Universities	114
Foundation Universities	65
Other Institutions	25
Foundation Vocational School	6
Total	210

In Table 2 shows total number of students in higher education at different education levels with respect to open and traditional education system in 2017. 23,6% of the total students were enrolled in online education institutions in Turkey.

Table 2. Number of Students in Higher Education Institutions in Turkey in 2017

		Pre-graduate	Undergraduate	Graduate	PhD	Total
Formal	Male	2.014.944	3.291.898	563.238	107.200	5.977.280
	Female	1.650.608	2.928.847	367.228	75.334	5.022.017
	Total	3.665.552	6.220.745	930.466	182.534	10.999.297
Online Learning	Male	656.598	1.112.780	25.556	0	1.794.934
	Female	789.702	809.633	4.408	0	1.603.743
	Total	1.446.300	1.922.413	29.964	0	3.398.677
Total	Male	2.671.542	4.404.678	588.794	107.200	7.772.214
	Female	2.440.310	3.738.480	371.636	75.334	6.625.760
	Total	5.111.852	8.143.158	960.430	182.534	**14.397.974**

New players in the higher education market are adopting sophisticated marketing techniques to persuade students to enroll to their institution (Beneke, 2011). Students' retention and their performance are influenced by the service quality provided by the higher education institutions (Kwek, Lau and Tan,

2010). Education quality is a complicated phenomenon influenced by different factors (Targamadze et al, 2010). In evaluation of effectiveness of OL, researchers focus different aspects, such as technology and human factor in e-learning system (Wu and Hwang, 2010). Different models have different dimensions to evaluate the effectiveness of OL; however in all studies the importance of service quality has been emphasized.

SERVICE QUALITY

A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kotler and Keller, 2012). According to Oldfield and Baron (2000), higher education can be seen as a pure service and educational services fall into the field of services marketing (Gruber, et al., 2010). The concept of quality is defined by Deming (1998) as "customer judgment about the product or service produced by the business", and by Crosby (1979) as the "degree of compliance of a product with the requirements". In literature there are two popular models used widely to measure service quality (Kang and James, 2004). The American perspective of service quality is based primarily on Parasuraman et all's proposition that is "Gaps model" also known as SERVQUAL, only reflects the service delivery process. It has five components which are reliability, assurance, tangibles, responsiveness and empathy (Parasuraman et al, 1988). The SERVQUAL model is frequently used to evaluate the students' perceived service quality in the education industry (Russell, 2005; Dursun et al., 2013, 2014). Grönroos (1984), based on the Nordic perspective, introduced the "perceived service quality model" which has three dimensions; technical quality, functional quality and image (Kang and James, 2004). Technical quality answers the question what the customer gets. Functional quality answers the question of how he gets it. Functional quality cannot be evaluates as objectively as the technical dimension. The organization's image works as a filter and can positively or negatively modifies the customers' perception of service quality. The expectations of consumers are influenced by their view about company and its image so corporate image or brand image will be an important dimension of perceived service quality (Grönroos, 1984).

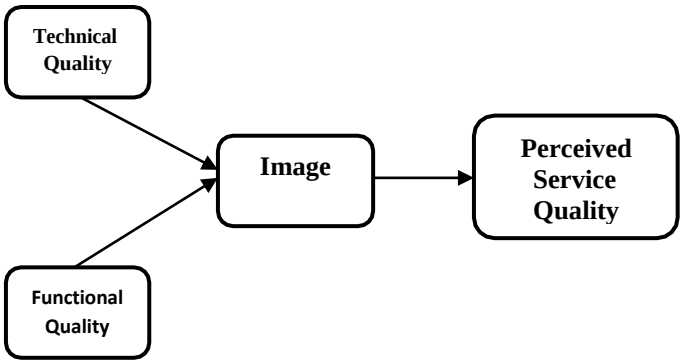
BRAND IMAGE

Brand is a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors. It is generally agreed that a brand adds to the value of a product or service. This added value is termed brand equity. Marketing researchers suggested brand image is a vital element of brand equity. Keller (1993) defined brand image as "a set of perceptions about a brand as reflected by brand associations in consumer's memory". Aaker (1991) defined it as "a set of associations, usually organized in some meaningful way". As all companies, higher education institutions which hold a favorable image by the public would definitely gain a better position in the market, sustainable competitive advantage and increase market share (Sondoh et al, 2007). Higher education institutions should develop a distinct image to create a competitive advantage in an increasingly competitive market (Gündüz and Yener, 2012). According to Kotler and Fox (1995), an institution's current image is often more important than quality because perceived image actually influences choices made by prospective students. Students' retention and their academic performance are influenced by the service quality provided by the higher education institutions (Kwek, Lau and Tan, 2010).

RESEARCH METHODOLOGY

To measure service quality, Grönross Service Quality Model was used. This model is more appropriate for representation of service quality than the SERVQUAL perspective, which concentrates only on functional quality (Kang and James, 2004). The model is represented below in Figure 1.

Figure 1: Grönross Service Quality Model



Hence there are three research hypotheses, and they are seen below,

H_1: Functional quality has significant effect on image of students, who are enrolled an online higher education program.
H_2: Technical quality has significant effect on image of students, who are enrolled an online higher education program.
H_3: Image have significant effect on perceived service quality of students, who are enrolled an online higher education program.

Research Participants and Measuring Instrument

The population of the research is nearly 3.4 million students who enrolled an online education program in a university in Turkey. Convenience sampling method was used and participation was voluntary. The survey was conducted anonymously and no personal information was collected that could be used to identify any individual participants. Sample size of the research is 294 students. Data was obtained using an online questionnaire which contains close-ended questions. At Table 3 and Table 4 demographic and profile characteristics of participants are summarized.

Table 3. Demographic Characteristics of Participants

		Male		Female	
		Frequency	%	Frequency	%
Age	20-25	61	36,1	53	42,4
	26-30	47	27,8	34	27,2
	31-35	33	19,5	17	13,6
	36-40	14	8,3	8	6,4
	40+	14	8,3	13	10,4
Marital Status	Married	74	43,8	49	39,2
	Single	95	56,2	76	60,8
Have a child?	No	101	59,8	79	63,2
	Yes	68	40,2	46	36,8
Have a job?	No	44	26,0	66	52,8
	Yes	125	74,0	59	47,2
Monthly Income	0-2000	66	39,1	44	35,2
	2001-3000	31	18,3	12	9,6
	3001-4000	21	12,4	6	4,8
	4000+	20	11,8	2	1,6

According to the demographic characteristics %74 of male students and %47,2 of female students have a job. Half of the male students and %37,6 of the female students have graduated from another higher education institution before. The both group has nearly same ratio about Internet connection point for the courses.

Reliability Analyses

Internal reliability of the factors is calculated with Cronbach's alpha test. It is expected the alpha value is greater than 0,7 (Nunnally, 1978). According to the result of the analysis, Cronbach alpha value is 0,809 for males and 0,771 for females. It means the measurement instrument has sufficient internal consistency for further analysis such as factor analysis.

Table 4. Profile Characteristics of Participants

		Male		Female	
		Frequency	%	Frequency	%
Has graduated before?	No	79	46,7	78	62,4
	Yes	90	53,3	47	37,6
Connection to OL System	No connection	21	12,4	11	8,8
	Mobile	60	35,5	43	34,4
	Home	78	46,2	57	45,6
	Workplace	10	5,9	14	11,2
Course material	Course book	87	51,5	68	54,4
	Supplementary books	109	64,5	73	58,4
	Online system	83	49,1	70	56,0
	None	7	4,1	3	2,4

According to the results in Table 5, male students' perception about functional quality and image is higher than female students. However female students' technical quality perception is higher than male students.

Table 5. Descriptive Statistics of Service Quality Factors

	Male		Female	
	Mean	Std. Dev.	Mean	Std. Dev.
Functional Quality	2,77	0,76	2,56	0,66
Technical Quality	2,62	0,88	2,65	0,82
Image	2,60	0,94	2,45	0,77

Correlation Analysis

In Table 6 correlation analyses between factors in Grönross service quality models are seen. According to the results all factors have significant and positive relationship with each other. Functional and technical quality factors have higher correlation with image factor. However the relationship between technical quality and functional quality is positive and low comparatively (%18,7).

For male students, there are positive relationships between all the factors included in the Grönross service quality factors, then we cannot reject any of the research hypotheses (H_1, H_2, and H_3). However for female students, there is no significant relationship between technical quality and functional quality factors.

Other Analysis

Technical quality perception of married male students is higher than single male students ($\mu_{married}$ = 2,77,

μ_{single} = 2,50). Also image perception of married male students is higher than single male students ($\mu_{married}$ = 2,85, μ_{single} = 2,40). Functional quality perception among female students who have a job is higher than who do not have a job (μ_{work} = 2,69, $\mu_{nonwork}$ = 2,45). Image perception of mle students who have a job is higher than who do not have a job (μ_{work} = 2,69, $\mu_{nonwork}$ = 2,35).

Table 6. Correlation Analysis of Quality Factors

		Male			Female		
		Functional	Technical	Image	Functional	Technical	Image
Functional	Pearson Corrl.	1	,**245**	,**541**	1	,079	,**454**
	Sig. (2-tailed)		,001	,000		,378	,000
	N	169	169	169	125	125	125
Technical	Pearson Corrl.	,**245**	1	,**644**	,079	1	,**577**
	Sig. (2-tailed)	,001		,000	,378		,000
	N	169	169	169	125	125	125
Image	Pearson Corrl.	,**541**	,**644**	1	,**454**	,**577**	1
	Sig. (2-tailed)	,000	,000		,000	,000	
	N	169	169	169	125	125	125

CONCLUSION

Online learning is an important issue in today's university education systems. With the developments in technology, OL became common and easily applicable for higher education institutions and students. Like many countries, universities in Turkey started to use OL system effectively. The most significant measures of OL effectiveness were the quality of the OL system and learner attractiveness. According to the results of the analyses, technical and functional quality of OL and image of institution have positive effect on students' perceived service quality. Since image of the higher education institution is affected many different factors, its effect on perceived service quality is not so high as technical and functional quality of OL system. If the university can enhance its technical and functional quality perception about distance learning system, students' service quality perceptions also enhance. However increase in image perception does not depend on only OL system and only some portion of the image raises perceived service quality about OL.

OL provides institutions to persuade students to enroll to their programs and these students belong to different social backgrounds. Women may not have chance for higher education degree because of many reasons such as economic reasons or responsibilities for children care. With OL programs women and other disadvantaged groups can easily get an undergraduate or graduate degree. Customer satisfaction is an important concept for all companies. In higher education institutions customers are students and academic staff. The success of a university largely depends on their customers' success. Universities have limited financial resource and OL is a useful tool for universities about cost saving. However if its customers' satisfaction level is low in OL courses in comparison with other courses, there are two choice for institutions. First, leaving the OL system and the second is to solve students' problems in OL system to provide academic and financial sustainability.

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GOOD PRACTICE AND THE UK LLB DEGREE OR: HOW I LEARNED TO STOP WORRYING AND LOVE THE 21ST CENTURY

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ABSTRACT
Law schools have - unlike for example the arts or humanities - been resistant to change when it comes to progressive student pedagogies, preferring to hold on to traditional models of teaching and learning. This paper looks at what is considered to be good practice in the current higher education landscape broadly, and then develops what it considers to be good practice for law schools specifically. This law-specific definition of good practice encompasses both active as well as reflective learning that can be facilitated by means of a blended classroom. Whilst traditional pedagogies remain prevalent in law schools generally, this paper questions whether a teaching-intensive modern UK higher education institution like Abertay University is able to break the mould. To this end the paper explores to what extent this definition of good practice is reflected within Abertay University's law school using as a case study the Public Law module of 2017/2018. It concludes by finding that, contrary to popular belief, there is much that ancient institutions can learn from modern establishments when it comes to the student experience.
Key words: legal education, good practice, reflective learning, active learning, problem-based learning, blended learning.

INTRODUCTION

Once the people were ruled by monarchs supposedly appointed by the hand of God; today, we are ruled by the democratic process of an election by the people and for the people. The world is changing at a rapid pace, and those who were once considered meek have come to inherit the Earth. However, are law schools for the taking, or are they the bastions of last resistance, relentlessly holding on to the traditions of days gone by? Have law schools accepted the notion of a student-centred classroom and, if so, have they been able to implement good practice in achieving this aim? In order to answer these questions, one must first understand what is meant by 'good practice'. The first part of this paper will unpack the notion of good practice generally, including an analysis of concepts such as active studentship and blended learning. It will conclude with defining what this means in the legal context. It will then look at how law schools continue to fail in implementing good practice. The next part of the paper will question whether teaching-intensive post-1992 institutions in the UK are the exception to the rule. The National Student Survey is used across the UK as a benchmark for student satisfaction. Students are asked opinions about their experiences within their institution, and to rate their satisfaction overall. In 2016, what seemed like a forgone conclusion left many dumbfounded. According to the NSS results, the only law school in the UK to receive a 100% rating for student satisfaction was not Oxford or Cambridge, but that of a post-1992 modern Scottish institution, Abertay University (HEFCE, 2016; King 2016). This success has been carried through to The Guardian's 2019 University League Tables, where Abertay University was ranked the top modern university in Scotland (University League Tables 2018, p. 1). Its Law programme has seen particular success within the league table, coming 2nd in Scotland and 7th in the UK overall, as well as being ranked 1st for student satisfaction and feedback within the UK as a whole (University League Tables 2018, p. 1). This paper will therefore examine as a case study Abertay University's Public Law (LAW105) module – for which I am the module tutor - and critically assess how it holds up against the definition of good practice in law.

Good practice in higher education and the LLB degree

A student-centred approach to learning is, simply put, an example of good practice. It requires students to learn by doing rather than listening. According to Gerald Hess:

> [Good practice] [e]ncourages active learning. Learning is not a spectator sport. Students do not learn much just sitting in classes and listening to teachers, memorising pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past

> experiences, apply it to their daily lives. They must make what they learn part of themselves (1999, p.401).

The idea of learning theory in a practical context is premised upon John Dewey's revolutionary approach to education, which posited that humans learn faster and better through participating in (i.e. active learning) rather than by receiving (i.e. passive learning) knowledge production (1902, pp. 7 - 9). He argues that traditional pedagogy sees the subject-matter of the curriculum rather than the student's experience as central. In other words:

> The subject-matter furnishes the end, and it determines the method with the ideal student being a 'ductile and docile' receptor (Dewey 1902: pp. 7- 8).

Instead, Dewey states that the student rather than the subject-matter ought to be the starting point of education, with the student's experience being central. The growth of the student is the ends, and the curriculum is only relevant in so far as it can provide the means for this growth to take place. Educators are therefore facilitators of knowledge construction rather than arbiters of intellectual enlightenment. His progressive approach to education can be summed up as follows:

> Learning is active. It involves reaching out of the mind. It involves organic assimilation starting from within. Literally, we must take our stand with the child and our departure from him. It is he and not the subject-matter which determines both quality and quantity of learning (Dewey 1902, p. 9).

It is upon Dewey's work that David Kolb's Experiential Learning Theory emerges (2015, pp. 49 – 51). Kolb posits that experiential learning is based on a learning cycle driven by how a person processes information (Kolb 2015, pp. 50 - 51). This learning cycle consists of four stages: Concrete learning; reflective observation; abstract conceptualisation; and active experimentation (Kolb 2015, p. 51). Concrete learning means that the student encounters new information. Once encountered, the student reflects upon what they have observed. Next, the student forms new ideas based on his reflection. Lastly, the student will use these new concepts/theories to problem-solve and test the implications of these ideas in practice. In this sense, learning is continual (Fry et al 2009, p. 16). This is a refined take on Dewey's theory, as Kolb's cycle requires students to learn not simply by doing, but by reflecting and processing information in such a way that they reconsider what they previously thought of as being objective truths (Fry et al 2009, pp. 16 - 18). Dewey sees the growth of the student as the ultimate end or central aim of education; Kolb agrees, but argues that in order for this growth to take place a degree of self-actualisation on the part of the student is required as he must step outside of himself to take stock of any shortcomings in his own knowledge or perceptions and adapt his approach accordingly. The importance of reflecting – either in a single session or over an extended period of time – in experience-based learning is highlighted by Boud and Walker (1998, pp. 191 - 193). Therefore, good practice is broader than Hess initially suggests: Good practice requires active learning, as well as educators facilitating opportunities for students to reflect upon their practical experiences meaningfully and grow based upon this exercise.

One of the ways to optimise active learning is by broadening access to information. A key way to do this is through blended learning, where parts of what would have occurred in the traditional classroom are moved to the online environment. Garrison and Kanuka describe blended learning as:

> [T]he thoughtful integration of classroom face-to-face learning experiences with online learning experiences (2004, p. 96).

This leaves one with a broad definition that can include online collaborations among students, such as participating in online chatrooms (Bugden et al 2017, pp. 90 – 98), to the use of online technologies as platforms for reflective practices and the submission of assignments/projects (Garrison and Kanuka 2004, pp. 96 - 100). Technology is therefore a key tool to facilitate active studentship (e.g. making lecture slides and reading materials available online at the start of a module for students to read ahead), both in real-time and away from the four walls of the classroom. It is central to good practice.

The above theoretical framework has been viewed by some as an 'attack on the lecture', which has itself been positioned in the media as archaic and 'dead' (Pickles 2016, p. 1; Arthur 2015, p. 1; Woolcock 2017, p. 1). This popular opinion has been fuelled by advocates of the above definition of good practice, most notably Nobel laureate and Stanford University Professor Carl Wieman, who argues in a radio interview that lectures are 'one of the most ineffectual teaching tools ever created' and likens them to 'the pedagogical equivalent of blood-letting' (Blewett 2016, p 1). He makes these statements premised upon research comparing the failure rate in modules and the performance on tests of traditional lectures versus active learning (Wieman 2014, pp. 8319 – 8320; Freeman et al 2014, pp. 8410 - 8415). Researchers found that the average failure rate decreased from 34% with traditional lecturing to 22% with active learning, whereas performance on identical or comparable tests increased by nearly half the SD of the test scores (an effect size of 0.47). These benefits of active learning were consistent across all of the different STEM (science, technology, engineering, and mathematics) disciplines and different levels of courses (introductory, advanced, majors, and nonmajors) and across different experimental methodologies (Wieman 2014, pp. 8319 – 8320; Freeman et al 2014, pp. 8410 - 8415). When considering these findings, Wieman states the following in a radio interview:

> 'You give people lectures and they go away and they learn the stuff. But it wasn't that they learned it from the lecture; they learned it from the homework, they learned it from the assignments. When we measure how little people learn from an actual lecture, it's just really small [sic].' (Blewett 2016, p. 1)

I would respectfully argue that the statements made by Wieman are both short-sighted and hyperbolic in nature. This is because his claims are built upon the supposition that lectures are the antithesis of active learning; in other words, that a lecture can never be part and parcel of active learning. I would argue that this supposition is incorrect, and therefore creates a false dichotomy within which the unquestioningly invaluable research findings he refers to operate. The lecture is not meant to stand on its own as a means of learning any more than a hammer could stand alone as a means of construction – to this end, the findings that lectures reap worse results than active learning provides leverage for the position that lectures *alone* are ineffectual teaching tools and must be coupled with other modes of teaching. Instead of being the antithesis of good practice, lectures form a vital part of good practice, because good practice is – as we have seen above – not a singular concept, but an assortment of different learning methodologies. Carrying forward Wieman's metaphor of 'ineffectual tools', we can liken students of law to the concept of an apprentice carpenter. In his toolbox is an assortment of tools: A hammer, a screwdriver, a set of pliers, measuring tape etc. With these tools, the carpenter knows he will eventually be able to make any number of items, the trade with which he plans to earn his bread. However, in order to put these tools to effective use, he must be able to practice using them before endeavouring to create an item good enough to sell (which he will do by way of tutorials, practical workshops and so on). In order for the carpenter to practice using his tools, he must first have knowledge as to what each item in his toolbox is, what it is used for, how it is used on its own and in conjunction with other items in his box etc. This foundational theoretical framework – or prism of understanding which will form the starting point for the student's understanding of the various components of the module – is refined in the lecture. A good lecture should aid in optimising the student's performance during practicals, tutorials and other forms of active learning.

Another issue with Wieman's statement is that it is premised upon the traditional 'sage on the stage' style lecture, which presupposes two things: Firstly, that the lecturer's ego is too awesome for him to open himself up to criticism, consider alternative points of views, questions and ultimately the possibility of learning from the learner's themselves (in which case the lecturer is left wanting); and secondly, that the student's do not engage with the subject materials before the lecture itself, coming to the class as empty vessels (in which case, the students are left wanting). Assuming the lecturer is not left wanting, there should be the expectation on the part of the lecturer that the classroom is not intended to be the initial source of the student's understanding, let alone the sole source. For example, if the carpenter knows he will be taught about the various uses of a hammer in the coming week's lecture and will be expected to demonstrate his finesse with the object in a future practical workshop, he ought to have taken steps outside of the classroom to source out as much information as he can about this object beforehand so that when he comes to the lecture, he will be somewhat well-versed in the topic at hand and be able to actively participate in the classroom, creating a dialogue between lecturer and student

which will enrich the theoretical framework upon which his practical workshop will be dependent. This is one of the reasons why good practice would have the lecture materials made available to students well in advance of the lecture itself (Bugden et al 2017, pp. 90 – 98; Garrison and Kanuka 2004, pp. 96 - 100). It is the reason why Wieman's statement that 'You give people lectures and they go away and they learn the stuff' is problematic. There should not be an assumption that students will learn information *de novo* in a lecture: Lecture theatres are not to be seen as the academic equivalent of Mount Senai, where divine intervention can be expected to impregnate each member of the audience with a miraculous understanding of the subject-matter. On the student's part, lectures as per Kolb's theory require independent investment by the students both before, during and after class-time in order for the lecture to be effective as a teaching method, for students will not (as per Wieman's findings) reap many benefits if they are to be passive recipients of the information necessary to succeed within the module and the programme as a whole. Students should be expected to take control for a large part of their own learning, for this is the price they must pay if they are to sit at the centre of a Dewey-like classroom. On the tutor's part, giving a lecture should force him to communicate, defend and – if the class is particularly engaged and the lecturer is a particularly good one – broaden his knowledge through argument in real time (Tokumitsu 2017, p. 1). As Amanda Fulford and Áine Mahon explain:

> The lecture [should] be seen as a special form of human encounter where the voice of the lecturer is modulated specifically for the hearing of the student. The lecture […] is, in fact, the initiation of a dialogic relationship between teacher and student. (2018, p.1)

In addition, there is a social benefit to be reaped from the lecture:

> The regular timing of lectures contributes to their sociality, establishing a course's rhythm. The weekly lecture, or pair of lectures, draws students together at the same time and place, providing a set of ideas to digest while reading supplementary material and breaking into smaller discussion sections. Classrooms are communities, and typically lectures are the only occasion for the entire group to convene physically. Remove the impetus to gather […] and the benefits of community disappear. (Tokumitsu 2017, p.1)

Indeed, in Kolbian terminology, the lecture can provide a place for concrete learning as well as reflection, both on the part of the student as well as the lecturer. This is so if we consider that the lecturer will provide additional information and insights into the material in the lecture rather than simply reading the prescribed materials to the classroom, as well as the fact that reflection is not a single event but an ongoing process (Boud and Walker 1998, pp. 191 - 193). As reflecting is ongoing, there is no reason why it cannot either begin or continue within the communal environment of a lecture theatre, a good lecture being one that espouses a host of viewpoints and arguments, and which encourages students to think critically of the topic at hand and share these thoughts in a safe communal space so as to learn not only from the lecturer, but from each other.

Within the LLB degree, active learning would therefore primarily consist of problem-based learning where students are required to apply the law – which will have been objectively explained and discussed within the lectures – to a complex set of facts in a particular medium, e.g. in the format of a moot or written opinion. Clients are unlikely to be concerned with what the law *is*, but with what the law *means* for them and their individual circumstances (West and Turner 2016, pp. 2 – 4; Varnava and Webb 2009, pp. 367 - 371). Therefore, within the context of the LLB degree, good practice would require problem-based active learning coupled with the opportunity for students to reflect upon their experiences and evidence their development throughout the course of the module.

Bad practice in higher education and the LLB degree

A survey for the UK Council on Legal Education on teaching, learning and assessment methods used in Scottish law schools found essays (96%) and examinations (94%) were overwhelmingly the commonest forms of assessment (Varnava and Webb 2009, p. 374). Such assessment methods neither acknowledge nor reward student development, but passive knowledge retention. Law has therefore tended to not adopt the

aforementioned active, student-centred approach to learning and instead largely maintain more conservative methods of teaching and assessment (Havelock 2013, p. 383). Traditionally, law has been taught by way of the case method of learning. In this method, the outcomes of legal cases and relevant pieces of legislation are analysed by students in order to learn what the law is, and classes are conducted with a view to helping students understand why this is so. Interaction with students is primarily premised upon the Socratic method, whereby the lecturer poses questions to students in class on said cases and legislation to ensure the students have correctly understood it as well as to assist students in identifying any ambiguities/lacunas in the law (Bugden et al 2017, pp. 86 – 87; Havelock 2013, pp. 382 - 384). Legal education centralises the subject-matter within the curriculum and utilises a pedagogy that is premised upon being able to read and correctly interpret legal writings in an abstract manner, with the ideal student being one who can retain all the principles and rules encountered throughout the module and recant them in the final examination. It is one of the few environments in which Wieman's 'sage on the stage' traditional lecture still exists.

Rohan Havelock, who chastises the fact that there has been little 'genuine and sustained commitment' in the legal field to move away from traditional methods of teaching the LLB degree as identified in the time of Dewey (2013, pp. 401 - 402), warns that:

> At best, steadfast adherence to the traditional and prevalent transmission-based lecture serves to reinforce […] passive behaviour [such as automated notetaking with little to no active engagement]; at worst, it actively facilitates it. This style of lecture deprives students of the opportunity to learn the crucial skill required to succeed in final examinations and in legal practice: problem solving (2013, p. 388).

Many law students suffer from high levels of stress, competitiveness, alienation and (unsurprisingly) substance abuse (Hess 2002, pp. 75 – 78; Havelock 2013, pp. 382 - 383). An Australian study revealed high levels of psychological distress and a high risk of depression in law students and practicing lawyers when compared with Australian community norms and other tertiary student groups (Kelk et al 2009, pp. 10 - 19). While no such study has been done in the Scottish context, according to the Scottish Young Lawyers' Association stress is the biggest single issue affecting Scotland's young lawyers (2016, p. 1). The traditional method of legal education both fails to optimise the capabilities of the students, as well as being detrimental to their overall well-being.

However, one must acknowledge that within the UK context most post-1992 universities are at least aspiring to change, which can be garnered from what is called 'graduate attributes' identified by many such institutions. These graduate attributes highlight the skillsets students ought to have acquired upon competition of their degree. When one examines the Abertay University Graduate Attributes, one can see that there is indeed a genuine and sustained commitment on the part of Abertay University to adopt an active, student-centred approach to legal education (and education in general). Among the attributes the university promises to instil in its graduates are the ability to critically evaluate information; be decision-makers and problem-solvers who can tackle complex issues using creativity and considered judgement; understand and embody self-awareness, honesty and integrity in their professional and personal lives; and know how knowledge is generated, processed and disseminated. All of these attributes require active learning and the ability to reflect upon their practice with the aim to personal and professional growth. That said, how is this being incorporated into the Abertay University LLB degree? Is the law degree being offered one that evidences good practice, or is it – like many of its historic counterparts - resistant to change and maintaining the traditional model of transmission-based learning in a curriculum-centred classroom?

Case study: Utilising good practice within Abertay University's LLB degree

For the purposes of this study, I have chosen to focus on the compulsory core first-year module of Public Law (LAW105), a first semester module taught in 2017/2018. At the time there were 71 students registered for the module. For Public Law, assessment was done by way of a four-part portfolio amounting to 100% of the final summative grade. Each of the four units were able to be submitted electronically for formative feedback at different dates prior to the one final summative submission date. Additionally, 20% of this portfolio's grade

came from the completion of a reflection exercise. Each of the four units in the portfolio sought to enable students to practice a different legal skill they would need both throughout their LLB degree as well as in the legal profession. For example, one unit required the students to find a case based on its neutral citation and draft a case summary (evidencing skills such as case referencing, searching legal databases, identifying key points of law within hundreds of pages of legal text etc); another unit required the students to conduct a literature review based on one of a shortlist of textbooks provided on the topic of constitutionalism (evidencing skills such as traditional research methodologies, familiarising themselves with legal language and literature, learning how to extrapolate key ideas from content-rich text etc); another unit required the students to find and summarise a piece of legislation based on its title as well as apply it to a handful of fictional scenarios (evidencing legal research, application of objective law to subjective facts etc); and yet another unit required students to write an opinion piece on the voracity of the rule of law in the present-day UK (evidencing skills such as formulating coherent arguments, structuring legal writing in a stylistically appropriate manner, referencing according to the OSCOLA style guide etc). As the portfolio exercises were individual tasks, tutorials (which took place for one hour each week) were used as an opportunity for groupwork and workshopping (contrary to the double lectures which also occurred each week). For example, in one tutorial students were tasked with forming groups of four and working together to create a single document answering a legal question I had posed to them. The groups had 24 hours to email me their answer, which was then collectively discussed in the next week's tutorial. The incentive to participate in these tutorials were that they covered work relating to the individual portfolio units each student would need to submit, thereby enabling students to learn from each other before they had submitted their own unit for formative assessment to me.

Utilising the above approach to teaching and assessment *in lieu* of a traditional end-of-year examination model (perhaps coupled with a lesser essay to make up the coursework component of the module) meant students were able to engage in a Kolbian experiential cycle of learning throughout the progression of the module. It enabled students to construct their own prisms of learning through active participation in the portfolio and tutorial exercises, meaning my role as tutor was to facilitate their professional development rather than to 'teach to the syllabus', transforming the classroom from curriculum-centred to Dewey's preferred student-centred platform. The use of a portfolio as the summative assessment provided a fairer, truer reflection of the students' growth and capabilities for which they were rewarded, rather than assessing them based on the degree to which they could memorise the required syllabus. The use of digital technology was crucial in achieving this aim as students were able to submit their units and reflections for formative feedback on PebblePad and for summative submission on Turnitin, as well as utilising lecture slides and additional materials from the start of the semester via Blackboard (so as to create a dialogic lecture environment where they would have been expected to read ahead of the scheduled lecture). Despite the large cohort, of the students who submitted for the summative assessment, only two failed to successfully complete the module. In terms of anonymous module feedback received, students generally found the use of a portfolio-based assessment to be a positive experience.

That said, one cannot divorce technology from the environment within which it is to operate. As Abertay University operates in Dundee and recruits most students from surrounding areas, the socio-economic realities faced by a large portion of its student body must be acknowledged. Dundee has an unemployment rate higher than both the Scottish and UK average, and in 2014 it had the highest rate of unemployment in all of Scotland (Dundee City Council 2016, pp. 45 - 53). Recent news reports reveal that secondary schools run by Dundee City Council underperform (based on the number of students who would be expected to achieve five or more Highers) to the greatest degree in the country, even when government benchmarks allow for factors such as deprivation (Sanderson 2018, p. 1). One must therefore accept that not all students will have 24/7 access to, or the technical know-how to use, technologies such as Skype or PebblePad. However, a counterargument would be that technology can help to solve some of the socio-economic issues experienced by the student cohort. For example, Dundee has the highest rate of teenage pregnancy in Scotland, and only recently lost its dubious claim to being the teenage pregnancy capital of Europe (NHS 2017, pp. 4 - 6). The use of blended learning may help to alleviate the childcare burden of students, therefore increasing participation throughout the LLB degree and a higher prospect of overall success.

Another issue is the sheer quantity of marking that comes with such a structure. For Public Law, there were at the time 71 students registered for said module. This would translate into 284 units of marking for formative feedback (four units per portfolio), and twice that when summative marking is included. This equates to 568 units of marking for a single lecturer, which must be balanced with other duties such as class preparation and teaching, research etc. This is not an uncommon occurrence within LLB degrees, as more people choose to study law. One of the ways this marking load could potentially be lightened – and which I would like to explore in the future – is the use of audio-visual feedback for formative assessments. There is a multitude of recent literature showing that students respond more favourably to video rather than written feedback (West and Turner 2015, p. 248; McCarthy 2015, pp. 164 – 166). A recent study conducted at the University of Glasgow found not only did 75% of students agree that they preferred to receive video feedback instead of traditional written feedback, but staff reported they returned more feedback as a result of this method (Kerr et al 2016, pp. 3 - 20).

CONCLUSION

Good practice within the LLB context requires both lectures as well as primarily problem-based active learning coupled with the opportunity for students to reflect upon their experiences and develop throughout the course of the module, this being facilitated by the utilisation of a blended approach to learning where appropriate. Based on my case study, this definition of good practice is indeed being implemented within the Abertay University LLB degree in so far as possible, differentiating it from the trend of traditionalist law schools. Indeed, modern teaching-intensive universities are more likely to embrace contemporary notions of student-centred pedagogy than their historic counterparts. Regardless of the cause and based on this very limited study, there is value in historically established institutions looking beyond their highly-ranked fortresses to modern places of learning for the benefit of their students' overall experience. Whilst the importance of teaching and student experience can all too easily get lost within the recent impetus for strong research profiles in a REF-centred environment, it is worth remembering that a university only exists as a place of higher education because it has someone to teach.

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GOVERNMENT INTERVENTION IN HIGHER EDUCATION: A THEORETICAL APPROACH

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ABSTRACT
Globalization, especially over the last three decades, has wrought many changes in a proper role of governments to not only the perception of some politic issues, such as effective policy making, but also some economic issues, such as maximizing the social welfare. Governments have a wide range of instruments in order to make their societies more welfare by increasing desired politically, socially and economically desired outcomes. In the light of relevant economics theory, the objective of this paper is to analyse the main three theoretical dimensions of government interventions: Public goods and social benefits, subsidization and externalities and market imperfection.
Key Words: Government Intervention, Higher Education, Public Goods, Subsidization, Externalities, Market Imperfection.

Introduction

Education is generally considered a public good and a human right for quite a long time. A public good is based on two distinct characteristics which include non-excludability and the non-rivalry in consumption. The latter characteristic means that there ought not to be a decrease in the benefits others receive as a result of additional people joining the educational system. Various international institutions especially the United Nations as such have backed the conceptualization of education. It is, however, important to point out that the education scene has changed significantly in the recent time given the involvement of many actors including for-profit organizations and non-state actors. To some extent, the higher education has a capitalism feel (Slaughter and Rhoades, 2004). Nonetheless, the government has continued to play its role. A reason behind this is based on the notion that despite the change being experienced in higher education in terms of participation, it is still considered a public good largely internationally (Vaira, 2004). There are various dimensions through which the government in intervenes in higher education. These dimensions include treating higher education as a public good to enhance social benefits, externalities and subsidizing and market imperfections.

Materials And Methods

Since the research is qualitative, the results of the study were based on extensive analysis of the existing literature and scholarly materials published on this subject matter based on the fact there provide reliable and accurate journals and academic books. It is certain to note that the credibility of sources is of importance as it influence the accuracy of the findings. That notwithstanding the year of publication was crucial to ensure that the information derived paints an accurate of what currently exists with regard to the subject matter. Content analysis is the main data analysis procedure utilised as it entailed the review of common themes in the articles that are utilised for the study.

Literature Review about Government Intervention in Higher Education

The literature review aims to provide a critical illustration of the role of government in higher education in terms of its right of intervention in the light of education's common and distinctive features. Musgrave (1969) highlight that the growing number of private actors in the education sector have seen it transform from being a pure public good to being an impure public good considering the rivalry within this sector sparked by intense competition. Kirkwood and Mundel (1975, p.132) add that "considering the large number of low-income families, a large number of youth are likely to miss higher education just because they cannot afford it".

Most of the literature reveals a level of similarity in the structures that education is one of the crucial role of government in any society in terms of the externalities of education: According to Ball et.al. (2002), higher education contributes significantly in one's economic and social wellbeing, which makes it, tis quite essential. Liefner (2003) state that education is a right of any person interested in accessing it. In the modern day however, everyone knows that accessing a college education is expensive with different people coming up with ideas on how to remedy this. Slaughter and Rhoades, (2004) suggest that the government can establish a welfare program aimed at supporting students from low-income families. Reay et.al. (2005) is of the view that this could go a long way in ensuring that every youth gains access to education regardless of their social class. Moreover, this can be quite effective particularly considering that students from low-income families often bear the blunt of the lack of equity in the higher education sector.

Marginson (2006) and Wilkins et al (2012) contend that only government roles alone are inadequate for good at making effective policies for education. Also, it is important to consider that the essential of education features: Where one individual is unable to access higher education for one reason or another, this is likely to have a ripple effect even to following generations and vice versa. Likewise, only those that can afford the education have access to it means that equity lacks significantly. Notably, education is classified as a public good meaning that its access is not limited to a certain group of individuals only. The involvement of the state can come in the form of establishing national institutions in which students can access education at fair prices.

Results and Discussion

I- Public Goods and Social Benefits

Musgrave (1941, 1959, 1969) gave a clear definition of public good "as a counterpart to a private good, is a good whose consumption does not diminish its availability to other consumers" (Samuelson, 1954). Pusser (2006) describes public goods as a good that posses the features of non-rivarly and non-excludability and one that is valued by the individals. According to Kotchen (2009), public goods have two defining features. The first is non-rivarly which implies that the accessibility of the product by one person does not minimise the ability of other people to enjoy the same good. The other feature is non-excludability which means that people cannot be disallowed to enjoy the good. In this context, there are goods and services that are considered best to be left to the market (Dill, 2003). This means that the market determines supply and the pricing of such goods besides influencing another key attribute of the products. On the other hand, there are goods and services considered to be only fairly and efficiently provided through government intervention. It education was to be left to the market which is largely capitalist, there is no telling how many would miss out (Marginson, 2013). Thus, higher education is considered a public good as it is one of those goods that require government intervention for the purpose of fair distribution (Olssen and Peters, 2005).

Besides being a public good, higher education is a right for every willing consumer. If left to the market, higher education can easily change from being a right for all to being a luxury. Notably, there are key characteristics that define pure public goods. One of these characteristics is non-excludability. These means that the benefits arising from public goods cannot be enjoyed only by those, which have paid for it. Instead, those that have not paid for it can enjoy the benefits as well. With private goods, enjoying the benefits is ultimately pegged on payment for the goods or services. Notably, the growing competition in higher education contributes to the seemingly growing consideration of it being termed as a private good (Marginson, 2006).

One major approach entails the enlargement of the public good standard from the inside by looking at the ethical considerations. Through this approach, the standard theory is interpreted loosely as non-excludability of education is considered on ethical ground and not on a technical one. Human rights in this approach come into play, which therefore makes education to be compulsory (Daviet, 2016). This brings about some semblance of fairness in the offering of higher education (Douglass, 2005). The difficulty in accessing higher education is well illustrated by the high costs attached to private institutions offering it. Devoid of government institutions offering the higher education, the vast majority would miss out and higher education would be a reservation of the financially capable (Arum et.al, 2007). The other characteristic of pure public goods is non-rival consumption. This means that consumption by one consumer does not bar another consumer from consuming

the same good or service. In other words, the marginal cost of offering the good or service to another person is essentially nil. It is vital to highlight that without government participation, these characteristics of public goods, higher education, in this case, would be irrelevant (Burke, 2004). Notably, the government ought to be concerned with the welfare of every citizen regardless of their financial capabilities. It is essentially the intervention of the government in higher education that makes it a public good. Despite the involvement of the state in subsidizing higher education through various measures, the education sector remains competitive due to the involvement of private institutions. The competition arises in terms of quality of education and tuition fees. This therefore ultimately classifies education as an impure public good.

"The categories of public goods and social benefits that may result from higher education and thus provide possible grounds for social support include knowledge; economic growth; political, social, and market functionings; geographic mobility; social and economic mobility; and various intergenerational effects" (Kirkwood and Mundel, 1975, p.121). Knowledge refers to the information and skills acquired through real life experiences as opposed to a formal process. The key difference between knowledge and education is that education is acquired through a formal process while knowledge is gained through real life experiences. Economic growth; basically, this refers to the growth in the ability of an economy to create services and goods in comparison to another period. Notably, a country that has a large number of educated people is likely to realise more economic growth than once that is lacking in education. Political, social and market functioning; market functioning refers to factors that enable a company to create successful products for the market. Notably, the execution of this function in addition to political and social status in any country is to some extent determined by the level of education in that particular country.

Furthermore, geographic mobility; this is a statistic that measures the level of migration in a population. Essentially, countries that have less developed higher education system are likely to experience high geographic mobility as people move to other countries in pursuit of education. Social and economic mobility; social mobility is defined as the movement of different groups of people across different social strata while economic mobility is the movement of people across different economic strata. Intergenerational effects; in some way this refers to the perceptions of educated and non-educated parents and the effect that this has on generations. Parental support is crucial in higher education. Parents who have not acquired a higher education are likely to be reluctant in support their children to pursue it while those that have are likely to support their children rather strongly. Moreover, youths from low-income families are likely to face major limitations in accessing higher education than students from financially well-off families (Kirkwood and Mundel, 1975).

II- Subsidization and Externalities

Higher education enjoys subsidies in multiple countries globally; even there are conspicuous differences in the level of subsidization offered (Altbach and Knight, 2007). Essentially, this is another dimension that government uses to intervene in higher education. In Scandinavian countries, public funds making up the universities budgets amount to about 90%, which means government subsidies, only covers 10% of the budget. In other countries such the US and UK, public funds make up for only 30% of the budget meaning 70% is offered by the governments as a subsidy (Foskett, 2011). These differences root from various factors including transparency in governance, level of economic development and general perception of education in the country among others (Dill and Soo, 2004).

Nonetheless, subsidization of higher education by the government is motivated by two main factors. The first one is the necessity to aid young people from low class of the society to gain education. The second reason is the perception that higher education is accompanied by positive externalities. It is likely that without government subsidies, there would be an underinvestment in higher education. The rationale behind this rests on the implications of positive production externalities.

In this context, "the following categories of externalities or external effects are often cited as justifications for social support for higher education:

(a) Lower welfare and transfer program costs;

(b) Increased tax yields; and
(c) External effects among students within the educational process itself" (Kirkwood and Mundel, 1975, p.128).

Lower welfare and transfer program costs; lower welfare refers to the existence of minimal support offered, in this context, to persons seeking higher education and transfer program costs on the other hand refer to costs attributed to the process of sponsoring individuals to seek higher education in other geographically distant regions. Increased tax yields; this is an increase in amount of taxes collected resulting from increase in revenue of the taxable persons or companies. External effects among students in the educational process; this refers to factors such as politics, state of the economy and social factors that influence the students outside the learning institution (Kirkwood and Mundel, 1975).

These concepts refer to a situation where an institution improves the well-being of others, but it does not receive any compensation. Thus, not many institutions would be willing to offer education unless they receive fair compensation (Luke, 2005). So far, little focus has been placed on the negative externalities. Considering this, some literature suggests that gathering more evidence on negative externalities attached to higher education could give more reason to suppress higher education rather than subsidize it. Nonetheless, it is vital to point out that, higher education is pertinent to the economy and the society as well (Mason et.al, 2009). Without the knowledge acquired through higher education, most economies would be far from achieving any meaningful developments (Marginson,2014). Subsidization is essential in levelling the ground in regard to accessing higher education (Morley, 2003). In so doing, however, the governments must perform due audit to determine the extent of subsidization merited by higher education (Apple, 2005).

III- Market Imperfections

Martin and Oughton (2000) point out that although free market economists and imperfect market economists believe that the role of the government is important in remedying market failures, they still insist an "optimal" level of government intervention, which requires careful consideration of the reason for market inefficiencies and for the design of the remedy. Additionally, Samuelson and Nordhaus (2010) state that government intervention is necessary if there are major market failures such as excess market power in an industry, an inadequate supply of information for consumers and workers, and externalities.

Despite the relentless efforts by the government and other actors to make higher education accessible to as many students as possible, the efforts have not been without imperfections and failures (Hentschke et.al, 2010). Market imperfections refer to cases where instead of improving a situation, the efforts employed appear to aggravate the situation further. Recently, the higher education has been overly prevalent worth market imperfections and failures globally (Mazzarol and Soutar, 2001). Over the last three decades, for instance, the cost to access college education has risen by about 1100%. Moreover, students relying on loans have had to pay back the loans at rates that are above market. The irony in these is that the main objective for government objective in higher education is to ensure that it is accessible to learners from low-income families. To some extent, instead of making higher education more accessible, the loans offered to students tend to make it even more expensive (Epple, et.al, 2006). Notably, some of these students are forced to pay the loans for years from their pay slips.

Besides the high cost attached to student loans, higher education has been mired in rife corruption. These have mostly been associated with most grants and loans designated for low-income students. Additionally, frequent conflicts between regulators and educators have derailed the efforts to make higher education more accessible (Enders, 2004). Often these conflicts end with blame placed on the victims. Notably, most students are pushed to pursue the degrees they do by for-profit and not-for-profit institutions that through their relentless marketing (Wilkins et.al, 2012). Most colleges have invested in luxurious facilities their objective being attracting wealthy full paying students (Ball et.al, 2002). This has also been motivated by global rankings of colleges and universities (Marginson and Van, 2007).

By so doing, they effectively cut off low-income students to avoid dealing with the government in various

situations (Elias and Purcell, 2004). The higher education markets in the US and in India are good examples of market imperfection and failures. The US represents market failures to intermediate the desired outcome except for a small group of institutions in an environment that is largely unregulated. The failures in the higher education market in India are represented by misdirected regulations that are highly intrusive. While deliberating and deciding on the various strategies to implement it as far as improving higher education is concerned, the governments ought to evaluate the risks associated with strategies exhaustively.

In this context, it can be said that "the three important market imperfections that effect higher education are: Capital market imperfections, monopoly and oligopoly behaviors, and the not-for-profit character of colleges and universities." (Kirkwood and Mundel, 1975, p.131): Capital market imperfections- in higher education context, capital market imperfections manifest in the sense that capital funds offered are limited yet enrolments to college calls for high cost outlay. Moreover, individuals from low-income families are more limited in attempts to access the capital funds. The not-for-profit, oligopoly, monopoly, and higher education features may result in losses to low class persons for various reasons. One of these reasons is the lack of demand responsive system to fulfil types of higher education demanded in the 21st century (Kirkwood and Mundel, 1975).

The not-for-profit, oligopoly, monopoly, and higher education features could result in disproportionate shortcomings to low income students due to several reasons. One of these reasons is the lack of demand responsive system to fulfil types of higher education demanded in the modern world. The second reason is that while low-income students accessing higher education may want to leave the institutions having garnered similar skills as their high-income counterparts, this may be derailed by the adverse experiences they encountered in colleges. (A demand responsive supply, students wishing to access traditional programs could benefit from existing compensatory activities. Considering the correlation between family income and high school achievement, it is imperative that low-income students are likelier to be affected by non-responsive supply). Third, the relentless pursuit by colleges to maximize the quality of their graduates as opposed to improving the net gains of their students may be a limiting factor in enrolment and have adverse effects on low-income individuals (Kirkwood and Mundel, 1975).

Conclusion

To some extent, higher education lays the foundation for economic development besides being fundamental to the wellbeing of those that access it and those that depend on themes. Notably, considering that education is a right for everyone, it is paramount that it be made accessible to all regardless of their social class (Reay et.al, 2005). It is for this reason that the governments take various measures to make higher education accessible. These measures include offering subsidies and loans to institutions and low-income students respectively. Unfortunately, these efforts have for a long time been derailed by corruption and macroeconomic factors such as inflation. Consequently, higher education has seemingly become more expensive than it ought to be.

The higher education market is currently characterized by the participation of various actors including private players, for-profit and not-for-profit actors. These, therefore, calls for a review of regulations to ensure that they sufficiently benefit the intended parties (Christensen and Eyring, 2011). In this context, it is true that "private actors are likely to provide education only for students whose parents can pay school fees. (Davied, 2016, p.3). "It is highly likely that some students could be locked out of school considering that private actors are often more interested in students who can afford to pay for the education" (Kirkwood and Mundel, 1975, p.132). Therefore, this paper fully concurs with the idea of government intervention, which is a need to ensure equity in education.

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INTERNAL AND EXTERNAL INTERACTIONS OF ENTREPRENEURIAL EDUCATION ECOSYSTEMS OF UNIVERSITIES: A STUDY AT TURKISH UNIVERSITIES

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ABSTRACT
In this paper, the actors inside and outside of the universities playing a role in entrepreneurship education have been studied. All of these actors, who also constitute the internal and external ecosystems of universities, not only create, shape, and develop entrepreneurship education at universities but also help the environment of the university develop entrepreneurially. To achieve this, universities, which are already the center of entrepreneurial ecosystems, can both make use of the entrepreneurial capacity of their internal stakeholders to the full extent and exploit the opportunities and advantages in their vicinity through their links with external stakeholders. In this study, internal and external activities and actors of entrepreneurship education at universities are discussed, and a case study focusing on universities in Turkey is given. At the end of the study, possible improvements for the interactions are evaluated and suggestions for further studies are given.
Keywords: University-Based Entrepreneurship Ecosystem, Entrepreneurship Education, Internal and External Actors, Stakeholders.

INTRODUCTION

In recent years, the world has experienced arguably the most potent economic force it has ever seen, which is entrepreneurship (Kuratko, 2005). Entrepreneurship, in its narrowest sense, involves capturing ideas, converting them into products and/or services and then building a venture to take the product to market (Johnson 2001). It is is the process of doing something new and something different for the purpose of creating wealth for the individual and adding value to society (Kao 1993). It is also defined as the processes of starting and continuing to expand new businesses (Hart 2003).

Entrepreneurship, which has been seen as a driving force for economies (Klein 2014; The Consortium for Entrepreneurship Education 2004) and a remedy for unemployment (Kritikos 2014), has been a popular subject of study ever since its importance has been appreciated (Wennekers and Thurik 1999; Finkle and Deeds, 2001, Kuratko 2005). In recent years, it has become fashionable to view entrepreneurship and entrepreneurship education as the panacea for stagnating or declining economic activity in both developed and developing countries (Matlay and Carey 2006). With this, universities began to give entrepreneurship education and some questions such as whether it is possible to educate people to be entrepreneurs or how to give a better entrepreneurship education arose.

Entrepreneurship education is defined as all educational activities that seek to prepare people to be responsible, enterprising individuals who have the skills, knowledge, and attitudes needed to prepare them to achieve the goals they set for themselves to live a fulfilled life (Curth 2015).

It is always pointed out that entrepreneurs must be good at a lot of skills. That's why teaching entrepreneurship is a complex, process-oriented, and interconnected activity. It involves many ambiguities as the aim is to stimulate the process of developing idiosyncratic new ventures (Rasmussen and Sorheim 2006). It is difficult because the act of entrepreneurship itself often requires the nascent entrepreneur to comprehend market, technical, organisational, and resources issues that may range across individual, firm, industry, region, and other macro levels (Corbett 2011). That means the skills an entrepreneur needs to be successful go beyond the business skills that are "easy" to teach in a classroom; for example, finance, accounting, and economics and include people skills, like leadership and management, that are best learned through experience. Because of this there are clearly limitations to using traditional educational methods to teach it. It can't be taught in the traditional sense of sitting in a classroom listening to a lecture or by the typical case-study method used in business programs. It is very

much an experiential subject that requires "learning by doing"—that is, action and interaction in the real world to find product/market fit (Damen 2014). The same point is emphasized by Dana (1987), who says, entrepreneurial skill development should be emphasised; and by Kuratko (2005), who says, entrepreneurial education should incorporate skills and practical experience as well as exchange and learning from active entrepreneurs. Innovation techniques, role models, and success stories are also important but they are seen as less crucial components of entrepreneurship education (Amway Global Entrepreneurship Report 2014).

There are various activities at universities to expose the students to real life situations as much as possible. Some of them are commonly-used ones like collaborating with industry, exposing students to entrepreneurship, creating opportunities to get them to meet with mentors, inviting alumni and entrepreneurs to the campus for conferences or mentorship activities and organizing contests. Some others are seldom used and university specific ones, like Venture Labs used by Stanford University (Stanford Report 2012) or The Centre for Social Innovation at the University of Cambridge, which acts as a platform for research and engagement with social innovators, academia, and policy in the United Kingdom (UK) and across the world (Centre for Social Innovation 2016) or the E-Center at the Massachusetts Institute of Technology (MIT) , which runs the $50K ($50 000) Global Startup Workshop, which trains people from universities in other countries, such as Italy, the UK, and China, to run their own business plan competitions (Dunn 2005).

Entrepreneurship Education Ecosystem at Universities

As Volkmann et al. (2009) point out, the success of these activities and the success of entrepreneurship education at universities depend on some factors such as developing effective educators, curriculum development, outreach (engagement of business), advancing innovation, sustainable funding, and being in a good entrepreneurial ecosystem.

Of these, a good entrepreneurship ecosystem, which provides the schools with many elements necessary to give a better entrepreneurship education, is not different from any ecosystem where there are a number of interconnected key elements that constantly interact and mutually reinforce. It encompasses a number of moving parts – components that have to come together to facilitate innovation and growth (Nadgrodkiewic 2013). It is pointed out in the *United Nations Conference on Trade and Development Report* (2011) that an entrepreneurship ecosystem, like other ecosystems, is also a system of mutually beneficial and self-sustaining relationships involving institutions, people and processes that work together with the goal of creating entrepreneurial ventures. It includes businesses (large and small firms, as well as entrepreneurs), policymakers (at international, national, regional, and local levels), and formal (primary, secondary, and higher education) and informal educational institutions. The different stakeholders are involved in a series of symbiotic actions which include awareness and outreach, the development of human capital and critical talent, public – private partnerships, multiple sources of innovation, intellectual property, and funding. In a dynamic and growth-generating entrepreneurial ecosystem, there is a high degree of interaction and coordination among these key elements. One of the actors of entrepreneurship ecosystems is universities, and there is a major global trend towards strenghtening entrepreneurial capabilities in universities across the world (Graham 2014).

As noted by Fetters et al. (2010) universities are at the hub of economic development around the world providing infrastructure, resources, and means to develop entrepreneurial communities. They also argue that entrepreneurial ecosystems evolve and expand through specialization of knowledge and innovation as told by Brush (2014). It is also pointed out by Fritsch and Slavtchev (2006) that academic institutions contribute to the performance of innovation systems by generating and diffusing knowledge. In addition, Graham (2014) emphasizes the consensus that the world's most successful technology innovation ecosystems were created and conducted by universities. This being the case, it is not incorrect to say that universities with their teaching, research and outreach capacity, and capabilities are the center of entrepreneurship ecosystems. This new structure centered around the higher education institutions, HEIs, is referred to as University-Based Entrepreneurship Ecosystems, U-BEEs (Fetters et al. 2010).

In a university entrepreneurship ecosystem, there are both internal university activities and external interactions

within the community in new venture creation and in giving an effective entrepreneurship education. Fetters et al. (2010) analyse three universities focused on the new venture creation aspect of an entrepreneurship ecosystem and include details of internal university activities as well as external interactions within the community**.** They point out that the U-BEE includes multiple levels – the individuals who are the students, faculty, staff, practitioners, and administration; groups who are faculty and students; organizations which are incubators, and centers; events; and community stakeholders such as government, policy-makers, industry, and funders.

Internal activities

Brush (2014) reports from Fetters et al. (2010) that central to the U-BEE are internal entrepreneurship activities, revolving around curricular, co-curricular, and research activities. These activities which constitute internal entrepreneurship education prosper and become more effective in a potent ecosystem. This ecosystem is called the internal entrepreneurship education ecosystem (Brush 2014).

Curricular activities, the components of which are objectives, content, method, and evaluation (Umair 2011), are among the most important activities in an internal entrepreneurship education ecosystem. High quality entrepreneurship courses, materials, and research are necessary for the development of a curriculum which focuses on ingraining a new entrepreneurial spirit and mindset among students (World Economic Forum 2009). To make curricular activities more effective, environmental circumstances can be taken into consideration. That means curricula can be tailored to the local environment, existing resources and problems can be used in the creation of case studies and entrepreneurs in the environment can be role models or mentors for the students. On the other hand, they can include appropriate representations of gender, youth, indigenous people, people with disability, informal enterprises, and enterprises based in rural areas. Enterpreneurship programmes which are developed across disciplines and supported by technology and media are also a great help in creating effective curriculum that can reach larger audiences (United Nations Conference on Trade and Development 2011). On the other hand, Wicklein and Schell (1995) emphasize the importance of the contributions of various shareholders in teaching and say that cross-curricular teaching methods and multidisciplinary approaches have made a positive difference in both teachers and students.

Another component of the internal entrepreneurship education ecosystem is co-curricular activities. These are the activities that enable to supplement and complement the curricular or main syllabi activities. They are connected to the academic curriculum and are very important in strengthening classroom learning (Co-curricular Activities 2012). Co-curricular activities in entrepreneurship education include but are not limited to campus-wide business plan competitions, venture capital competitions, mentoring programs, summer school programs, conferences, seminars, workshops given by successful entrepreneurs (especially prominent alumni of the university), company visits, matchmaking events between students and external stakeholders (Survey of Entrepreneurship Education 2008; Mansheng and Xu 2012).

Another building block in the internal entrepreneurship education ecosystem is research activities. Wissema (2009) says that research has been an objective of universities after Napoleonic times, but those universities were not interested in the application of research findings. After the Second World War, universities or their staff and students started to bring knowledge to the market, either by selling it to existing enterprises or by creating new firms. Commercialisation of know-how became an objective of top universities (Wissema 2009). Today, research done at universities not only contributes positively to the quality of education but also creates and transfers new knowledge to solve economic and social issues. It both gives the students first hand experience in what they do (Madan and Teitge 2013) and contributes to entrepreneurship because university research is conducted not only for the benefit of professors and academics but also for startup businesses. Many university research labs are capable of developing and conducting research on behalf of startup businesses (Wells 2012).

External activities

On the other hand, there are external entrepreneurship activities which can provide entrepreneurship students with real life experiences. Entrepreneurship education is regarded as an activity that takes place in interaction between academic input and practice-related supplements. That means entrepreneurship is not taught only in an

academic setting. Entrepreneurship students need to have access to and be engaged in practice-oriented activities. Some of these are conferences, forums, and business plan competitions organized by big companies. These companies also organize training courses for entrepreneurs and faculty, accelerator programs, and online tools such as videos and games to practice corporate social responsibility and mentor new value creation. Government policymakers along with public and private sector leaders can increase recognition of the importance of entrepreneurship education, equip people with the ability and inclination to start businesses, and encourage cooperation among multiple partners to deliver effective programs (Thomas and Kelley 2011). These activities provide input to the entrepreneurial education of the students. They give a broader, more practice-related picture and make actual contributions to the entrepreneurial activities of the institution by providing knowledge, expertise, mentoring, social capital, and financial support. In addition, businesses that foster an entrepreneurial culture contribute directly to the entrepreneurial education process themselves by giving employees the opportunity to cultivate entrepreneurial skills and aptitutes at work (Survey of Entrepreneurship Education 2008; World Economic Forum 2009).

Entrepreneurship education has an impact not only on the students receiving it or on the institutions it is given at, but also on the economy and society. Especially the immediate vicinity of the institutions giving entrepreneurship education benefits from entrepreneural activities in the school. These activities may impact the society in two ways: 1) To facilitate regional development 2) To foster entrepreneurship literate societies (Curth 2015).

METHOD

In this research, the ecosystem of university entrepreneurship education in Turkey is investigated with respect to its internal and external components, and the present situation of entrepreneurship education ecosystem at universities in Turkey is discussed. It is hypothesized that the importance of entrepreneurship education has been appreciated by universities in Turkey, which is a developing country, and necessary steps have been taken to give entrepreneurship education at universities. To test this hypothesis, a survey consisting of two parts was prepared. The first part of the survey is made up of Yes/No questions and provides information on the demographic variables of the universities. The second part of the survey is made up of Likert-type statements which are rated on a 5-point scale ranging from 1 (Almost Always True) to 5 (Almost Never True) and provides information regarding the interaction of the universities with internal and external stakeholders for the betterment of entrepreneurship education. Some of the questions and statements used in the survey are prepared in the light of *Survey of Entrepreneurship Education in Higher Education in Europe* (2008) and *The National Survey of Entrepreneurship Education in the USA* (2014). The survey was sent to all universities (175 universities) in Turkey. Of these, 93 universities responded to it properly. When analyzing the data from the survey, descriptive statistics is used and the mean value of the statements are taken into consideration.

FINDINGS

Internal Entrepreneurship Education Activities at Turkish Universities

Upon evaluation of the survey, it is concluded that 80 percent of the universities in Turkey have an entrepreneurship club, which may mean the importance of entrepreneurship is getting to be appreciated by the universities This is followed by the technology transfer offices, offices in science parks, and entrepreneurship centers. The facility which is the least common in Turkish universities is incubation centers. The programs leading to entrepreneurship degrees are not common in Turkish universities. Only 19 percent of these universities have programs leading to a degree in entrepreneurship. Table 1 shows entrepreneurship related groups, facilities or programs.

Table 1. Entrepreneurship Related Groups, Facilities or Programs at Turkish Universities

	Name	***f***	***%***
The groups, facilities or programs the universities have concerning entrepreneurship [a]	Entrepreneurship Program	15	19
	Entrepreneurship Center	31	37
	Entrepreneurship Club	66	80
	Incubation Centre	27	33
	Technology Transfer Office	40	48
	Science Park Office	35	42
Total number of groups, facilities or programs		214	-

[a] There may be more than one facility at a university

79 percent of the universities in Turkey have entrepreneurship club activities, which are among the supportive and complementary activites of entrepreneurship education. 34 percent of the universities organize entrepreneurship competitions and 41 percent of them co-develop joint projects with other institutions and organizations. Besides these, 83 percent of the universities hold conferences and 80 percent of them invite guest speakers to contribute to the creation of an entrepreneurship spirit at the university. In total, there were 320 entrepreneurship-related activities at the universities which responded to the survey in 2015. Table 2 shows co-curricular entrepreneurship activities at Turkish universities.

Table 2. Co-curricular Entrepreneurship Activities at Turkish Universities

	Activity	***f***	***%***
Co-curricular Entrepreneurship Activities at Universities[a]	Club Activities	77	79
	Conferences	81	83
	Guest Speakers	78	80
	Competitions	33	34
	Joint Projects	40	41
	None	1	1
Total Number of Activities		319	-

[a] There may be more than one activity at a university

As Brush reports, Fetters et al. (2010) point out that internal entrepreneurship activities are the central part of U-BEE and these revolve around curricular, co-curricular, and research activities (Brush 2014). Like most universities in the world, the universities in Turkey have many internal entrepreneurship activities as well as external ones to give a better entrepreneurship education (Ozdemir 2016). Following statements related to in-university activities are prepared to see the existence of a potent ecosystem supporting entrepreneurship education in the universities in Turkey and determine its strong and weak points, if there are any.

Table 3. Internal Activities at Universities Supporting Entrepreneurship Education

In-University Activities for Entrepreneurship Education	$\bar{X}$	***sd***
Entrepreneurship is embedded in our institution's overall mission statement.	3.45	1.18
The purposes and principles of the entrepreneurship education in our university are set.	3.95	1.00
Different faculties/disciplines at our institution have their own entrepreneurship policies and goals.	3.53	1.11
The instructors to give entrepreneurship courses in our university get an extra training beforehand.	2.40	0.93

Our university imports the methods and curriculum it uses in entrepreneurship education from other universities.	2.41	0.91
There are some entrepreneurship education methods and curriculum developed by our university.	3.45	1.03
The fact that our university doesn't have enough financial resources alloted to entrepreneurship education prevents the continuity, development and growth of it.	2.78	1.20
Some research is done in our university to develop entrepreneurship education. (such as curriculum, material or research development).	3.41	1.18
The activities in our university both support and motivate the entrepreneurship activities of its students and personnel (such as guiding, sharing research results.).	3.71	1.05
Entrepreneurship research and education is done on interdisciplinary or interdepartmental basis.	3,56	1,25
The students are informed of and encouraged to take entrepreneurship courses.	3,61	1,17
In our university, it is important to develop local or national case studies about entrepreneurship to be used in classes.	3.50	1.12
There are some faculty staff with actual entrepreneurship experience lecturing in our university.	3.70	1.14
Our institution provides recognition for achievements of academic staff in entrepreneurship education.	3.13	1.35
Entrepreneurial courses and extracurricular activities about entrepreneurship are evaluated according to some criteria at certain intervals, inspected with respect to achieving the target and a feedback is given.	3.01	1.26
Average	3.30	1.12

The mean of the statements measuring in-university activities is 3.30. This figure indicates that the statements used to evaluate these activities are occasionally true for the universities, which means there are many attempts in the universities to make their entrepreneurship education better, and the universities actually are taking strong steps to realize their goals, however, there is still a lot to be done.

As the mean value of the statements aimed to comment on the strategy dimension is taken into consideration, it can be concluded that most universities include entrepreneurship in their strategy. This means the importance of entrepreneurship education is appreciated by Turkish universities, and they will take the necessary actions to fulfil the requirements of a good entrepreneurship education. It is clear that the purposes and principles of entrepreneurship education are set in most universities, and entrepreneurship is embedded in the policies and goals of not only the universities but also their faculties and disciplines. This signals the universities take the necessary steps to give better entrepreneurship education and intend to redesign their activities in such a way to include entrepreneurial purposes.

As the values of the statements concerning faculty show, although the universities want to give a better entrepreneurship education and include entrepreneurial targets in their strategy, they lack faculty specialized in entrepreneurship. This means courses related to entrepreneurship are given by instructors from other departments. It is also found that the faculty's achievements in entrepreneurship are not recognized by the university. This may be interpreted as a necessity for more incentives to stimulate the faculty to specialize in entrepreneurship and promote entrepreneurship education at universities. However, there are some faculty with entrepreneurship experience, which is a good asset for entrepreneurship education.

It is seen that the universities in Turkey lack the financial resources to support the development of entrepreneurship education. The lack of financial resources devoted to education is evident in the inadequate

number of schools and other facilities, insufficient classrooms, few, underpaid, and/or insufficiently trained teachers, lack of management and supervision, lack of quality textbooks and other learning material, and insufficient attention to standards and quality assurance. Each and every one of these results of insufficient funding can act as a barrier to education (Unesco Global Education Monitoring Report 2016). These factors, deriving from lack of financial resources, also act as a barrier to entrepreneurship education.

On the other hand, there are some activities signalling a lot is being done to support entrepreneurship education in Turkish universities. The students are informed about entrepreneurship, and they are encouraged to take entrepreneurship courses. The universities mostly develop local and national case studies about entrepreneurship for classroom use. They also usually develop their own entrepreneurship education methods and curriculum. Entrepreneurial research is done on both an interdisciplinary and interdepartmental basis regarding curriculum, material, and research and development. At most universities, courses and extracurricular activities on entrepreneurship are evaluated according to some criteria at certain intervals, and they are redesigned according to the feedback given.

All these show that universities in Turkey started put an emphasis on entrepreneurship education and support it with a number of internal activites.

External Entrepreneurship Education Activities at Turkish Universities

As stated before, both internal university activities and external interactions within the community play a role in new venture creation and in giving an effective entrepreneurship education in a university entrepreneurship ecosystem. The following statements are used to evaluate the external interactions of the Turkish universities with the community. Most of these interactions are within the scope of the outreach dimension of entrepreneurship education at universities. These statements are prepared both to observe the interaction between universities and society from the point of view of their contributions to society regarding entrepreneurship education, and vice versa.

Table 4. External Activities at Universities Supporting Entrepreneurship Education

Out-of-University Activities for Entrepreneurship Education	$\overline{X}$	***sd***
There is an on-line unit in our university through which the students or entrepreneurs can ask questions and get answers concerning the problems they are likely to meet.	2,84	1,36
Local entrepreneurs and managers can get consultancy service from our university if they like.	3,64	1,19
Certificate programs are organized in the areas such as entrepreneurship, technology management, innovation, and creativity for the people out of the university.	3,41	1,13
Our university makes use of the network it established with its external stakeholders (alumni, employers, trade associations) to contribute positively to its entrepreneurship education.	3,32	1,22
Our university uses channels such as club activities, conferences, guest speakers or web pages to communicate with its stakeholders in order to develop its entrepreneurship activities.	3,93	1,04
The students who take entrepreneurship courses in our university take part in out- of-the-school entrepreneurship activities. (Internship out of the university or taking part in regional activities and competitions.)	3,56	1,07
There is a cooperation and collaboration between our university and organizations supporting entrepreneurship to promote entrepreneurship education.	3,64	1,24
Our university supports entrepreneurship education and activities in the schools in neighbourhood.	3,04	1,32

Our university makes use of social media (such as Facebook, Twitter) as a part of its entrepreneurship education.	2,89	1,38
While the targets and curriculum of the entrepreneurship education are determined, the opinion and suggestions of the employers, investors, trade unions, and professional associations are taken into consideration.	3.25	1.26
Average	3.26	1.23

The mean value of the items in this dimension of the survey is 3.26. That means the authorities in charge of entrepreneurship education in universities appreciate the importance of out-of-university activities. They try both to make use of the resources provided by the stakeholders in the environment and to contribute to their entrepreneurial needs, however, it is concluded that there is still a lot to be done. Of the items they rated, the highest value went to the item, “Our university uses channels such as club activities, conferences, guest speakers or web pages to communicate with its stakeholders in order to develop its entrepreneurship activities”, which means the value of being in close connection with the external stakeholders is appreciated by the universities, and they make use of some channels in the best way possible. However, their interaction with external stakeholders is mostly through traditional ways such as face-to-face conversations. The question aimed to see if their relation with the environment is through online devices, “There is an online unit in our university through which the students or entrepreneurs can ask questions and get answers concerning the problems they are likely to meet”, got the lowest point in this dimension of the survey. That means universities don’t make use of online communication channels sufficiently. It is seen that although universities cooperate with external stakeholders, it is not through online devices. It is also concluded that the universities are not very good at making use of social media, such as Facebook and Twitter, in entrepreneurship education.

Apart from this, it is seen that universities try to make use of as many channels as possible to be in touch with the society. There is a win-win relationship between universities and their environment. Universities try to contribute to the development of their environment regarding entrepreneurial literacy through activities such as opening certificate programs for the people out of the university, supporting entrepreneurship education activities in the neighboring schools, and providing consultancy service for the local entrepreneurs and managers. On the other hand, they make use of the opportunities provided by the stakeholders in the environment. For example; the students can do internships in companies in the environment, take part in regional activities or competitions while universities can consult with the people concerned while shaping their targets or curriculum, so they can shape them according to the needs of the environment.

All in all, it is seen that the average points of four of the items in this dimension are “3” while five of them are “4” over "5". That means universities have some ties with the external resources to support entrepreneurship education while they contribute to the entrepreneurial development of the community around the university by organizing activities to create an entrepreneurial mindset among the people and helping the entrepreneurs in the vicinity with the problems they encounter in their businesses. However, not all of these activities are at the top level and their quality and quantity should be increased.

The data obtained at the end of the survey proves that the universities in Turkey are in beneficial interactions with their internal and external actors to give a better entrepreneurship education. This being the case, the hypothesis, which is "the importance of entrepreneurship education has been appreciated by universities in Turkey, which is a developing country, and necessary steps have been taken to give entrepreneurship education at universities" is accepted.

CONCLUSIONS

A lot is being done at universities all over the world to develop entrepreneurship education ever since its importance has been appreciated. It is certain that both internal and external activities at universities play a great role in the development of entrepreneurship education. These activities contribute not only to entrepreneurship education in universities but also to the entrepreneurship ecosystem around universities

both directly and indirectly. Being in a good entrepreneurship ecosystem contributes positively to the entrepreneurship education at a university. On the other hand, an entrepreneurial university contributes positively to the creation of a good ecosystem around it. Therefore, they complete and support each other in a never-ending cycle.

In this study, the contributions of internal and external actors to university entrepreneurship education are discussed, and entrepreneurship education in Turkish universities is studied regarding the external and internal activities targeted to develop entrepreneurship education in a university. It is found that entrepreneurship education in Turkish universities is developing, and there are both internal and external activities to ensure this. It is also seen that universities in Turkey not only make use of the resources supplied by the external stakeholders but they also try to meet their needs regarding entrepreneurship education.

At the end of the research, it is found that there are some points on which the universities are quite strong such as having a clear and focused strategy in entrepreneurship education, involving external stakeholders in entrepreneurship education to a great extent, and supporting the entrepreneurial activities of the students and faculty. On the other hand, there are some points that should be improved. They can be summarized under the following headings: paucity of faculty education, lack of financial resources, scarcity of online sources and social media usage. To improve these points, universities should:

- support professional development of the instructors and provide an extra training to the teachers who give entrepreneurship courses,
- find financial resources for the sustainability of entrepreneurship education,
- have more income generating activities related to entrepreneurship,
- try to get long-term, dedicated funding from alumni, esp. from those who are entrepreneurs,
- make use of social media (such as Facebook, Twitter) as a part of its entrepreneurship education to reach more people,
- provide an on-line unit in the university through which the students or entrepreneurs can ask questions and get answers concerning the problems they are likely to meet.

How these recommendations can be put into practice, what problems are likely to be faced in realization of these recommendations and how these problems can be overcome can be the subject of further studies. It shouldn't be forgotten that every country has its own facts and features regarding education just like every university has its own facts and features regarding the factors making up its entrepreneurship education ecosystem. The countries which realize the importance of entrepreneurship education have already started to take actions to give it, in the best way they can. Turkey is one of these countries and the findings of the research done at Turkish universities may give the researchers an idea on how well the importance of entrepreneurship education is appreciated and how much importance is given to internal and external activities and actors making up the entrepreneurship education ecosystem by the universities in a developing country like Turkey. Keeping in mind that entrepreneurship education doesn't have a long history in Turkey, it can be said that what is achieved today is promising for what can be achieved tomorrow; that is, entrepreneurship education is expected to gather momentum in the future. Taking some precautions to solve out the problems mentioned above will help universities improve their entrepreneurship education and help Turkey exploit its entrepreneurial potential.

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INTERNATIONALIZATION AS AN INEVITABLE SOCIAL CHANGE: AN OVERVIEW OF HIGHER EDUCATION CASE OF TURKEY

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ABSTRACT
Global competition for accepting international students for higher education has peaked recently. The developed and developing countries are competing to get the most of the share and Turkey is no exception in this regard. Millions of students have their higher education in foreign countries out of their countries' and home cultures' borders as a result of unstoppable globalization. It can be understood that the reasons behind this phenomenon varies from profit-making to language and culture spreading for the welcoming countries. Students, also, take into economic considerations since it has more opportunities such as cultural experience, job finding advantages, and it has scholarship possibilities which make studying abroad a very convenient and most of the time free experience. In this study, an overview of the reasons why countries welcome international students and why students choose to study abroad are reviewed. Turkey's higher education internationalization policy is investigated, and possible solutions are advised through a careful literature review.
Key words: internationalization, globalization, international students, student exchange programs.

GLOBAL COMPETITION FOR RECRUITING INTERNATIONAL STUDENTS

As national economies become more interconnected and educational participation rises, higher education comes on stage as a means to further students' levels and help them to improve their understanding of the world's cultures, languages, and business methods. Tertiary education is becoming more international through a number of means, including distance education, international education-related internships and training experiences, cross-border delivery of academic programs, and offshore satellite campuses (OECD, 2016). "Among the phenomena related to the internationalization of tertiary education, enrolling in a study program abroad is receiving considerable attention from students and policy makers. By providing an opportunity to expand knowledge of other societies and languages, studying abroad is an important cultural and personal experience for students, as well as a way to improve their employability in the globalized sectors of the labor market" (OECD, 2016). These activities range from traditional study-abroad programs, allowing students to learn about other cultures, to providing access to higher education in countries where local institutions cannot meet the demand. Other activities stress upgrading the international perspectives and skills of students, enhancing foreign language programs, and providing cross-cultural understanding. (Altbach & Knight, 2007)

Global competition for the recruitment of international students is increasing as international education has become a major export industry at the university level, generating foreign exchange and economic benefits for universities and receiving destinations (Marginson, 2010). In this regard, student mobility has increased dramatically over the recent past, due to a number of factors. The exploding demand for tertiary education worldwide and the perceived value of studying at prestigious post-secondary institutions abroad contribute to an increasing and diversified flow of international students, ranging from those who cannot find a place to study in post-secondary education at home to students of high academic achievement studying at high- quality programs and institutions. In addition, the educational value associated with a diverse student body, the substantial revenues that can be earned by expanding education for international students, along with other economic and political considerations prompted some governments and institutions to make major efforts to attract students from outside their national borders (Altbach & Knight, 2007; Knight, 2008)

TURKEY'S PLACE IN THE COMPETITION

"Between 2000 and 2011, the number of international students has more than doubled. Today, almost 4.5 million tertiary students are enrolled outside their country of citizenship. The largest numbers of international students are from China, India and Korea. Asian students account for 53% of all students studying abroad worldwide. New players have emerged on the international education market in the past decades, such as Australia, New Zealand, Spain, the Russian Federation and, more recently, South Korea. By contrast, the share of international students in some of the most attractive countries – Germany and the United States, for instance – has declined. As countries increasingly benefit from student mobility, the competition to attract and retain students has diversified the map of destinations over the past decade" (OECD, 2013). Turkey is one of the attractive destinations for the international students in tertiary level who are seeking an abroad study experience. According to the statistics published by Turkey's Council of Higher Education (2017), the total number of foreign students is 108.076, and the number of foreign students registered in 2016 is 25.827. It can be understood from the data that Turkey attracted nearly one- fourth of its sojourner students in only one year, and it is a rapid growth. The ten biggest student exporter countries and number of their students in Turkey are Syria (15.042), Azerbaijan (14.878), Turkmenistan (10.418), Iran (6099) Afghanistan (5251), Iraq (5012), Germany (3755), Greece (2285), Kyrgyzstan (2032), Bulgaria (2030) (Turkey's Council of Higher Education, 2017). As can be understood from the data, Turkey attracts most of the foreign students from Turkic or surrounding countries. It can be inferred here that foreign students tend to select the host country that has a similar culture with their own countries. It is very surprising to see Germany on the top ten list because it has a totally different religious, cultural and geographical background with Turkey. However, the situation can be explained that most of the students coming from Germany have Turkish origins who had migrated to Germany with laboring purposes (Inter- university Council of Republic of Turkey, 2016, p. 23). Indeed, this does not change the fact that Turkey accepts and is going to accept more and more sojourner students and be an attractive place in the years coming for the ones who seek a borderless education.

MOTIVES OF INTERNATIONALIZATION OF TERTIARY EDUCATION

According to Knight (2008, p. 2), the term 'internationalization' and the definition of it is not new, it has widely been used in political science and governmental relations, but its popularity in the education sector has really soared only since the early 1980s. Prior to this time, "international education" and "international cooperation" were favored terms—and still are in some countries. In the 1990s, the discussion centered on differentiating "international education" from such overlapping terms as "comparative education," "global education," and "multi-cultural education."

As globalization advances, internationalization is becoming an important initiative for many universities around the world. Internationalization is changing the world of higher education, and globalization is changing the world of internationalization. Key drivers for this transformation are the development of advanced communication and technological services, the dominance of the knowledge society, increased international labor mobility, more emphasis on the market economy and the trade liberalization, increased levels of private investment and decreased public support for education, and lifelong learning (Knight, 2008). Internationalization is often confused with globalization. We define globalization as the economic, political, and societal forces pushing 21st century higher education toward greater international involvement (Altbach & Knight, 2007). The results of globalization include the integration of research, the use of English as the lingua franca for scientific communication, the growing international labor market for scholars and scientists, the growth of communications firms and of multinational and technology publishing, and the use of information technology (IT). IT facilitates communication; permits efficient storage, selection, and dissemination of knowledge; and allows providers to offer academic programs through e-learning (Altbach & Knight, 2007).

In his article, Kubota summarized the main motives as "internationalizing higher education in the past decade has been influenced considerably by a global trend toward expanding trade in services and increasing international competition for human resources in a knowledge economy (Kubota, 2009, p. 613). The importance of internationalization is indeed increasingly discussed in economic terms. Student mobility and language learning are caught in this trend. For instance, in advocating for increasing the number of international students in

the United States, the Association of International Educators (NAFSA) discussed the economic benefits that tuition fees and living expenses paid by international students bring to the U.S. economy—approximately $15.54 billion during the 2007–2008 academic year." It can be easily understood here that the main motive behind internationalization of higher education is an inevitable globalization which every country must adapt or else they will fall behind the world agenda. The second motive is, of course, profit making via tuition fees and other side spending inside the host country.

Altbach & Knight (2007) summarized the motives of international education as follows:

- *Profits:* Earning money is a key motive for all internationalization projects in the for-profit sector and for some traditional nonprofit universities with financial problems
- *Access Provision and Demand Absorption:* The proportion of young people demanding and obtaining access worldwide expanded dramatically with the advent of mass higher education. Demand is rapidly increasing, even in countries still enrolling less than 20% of the age group, such as India, China, and much of Africa. Many international higher education services— focused on profits—provide access to students in countries lacking the domestic capacity to meet the demand. Access can take many forms: branch campuses, franchised foreign academic programs or degrees, or independent institutions based on foreign academic models.
- *Traditional Internationalization*: Many universities have participated in international activities for decades, some for a century or more. Prestigious, selective U.S. colleges use international programs to provide international and cross-cultural perspectives for their students and to enhance their curricula.
- *European Internationalization:* EU authorities actively pursued academic internationalization for more than two decades, as part of the move to economic and political integration. At first, the EU promoted and lavishly funded programs such as ERASMUS that provided large numbers of EU university students with academic experiences outside their home country. The scope of European regional integration expanded, and now the Bologna process harmonizes entire academic systems to ensure compatible degree structures, transferable credits, and equal academic qualifications throughout the EU. European internationalization mainly focuses on the countries of the EU—students are still encouraged to study abroad within the EU— though several non-EU member states have joined the Bologna process.
- *Developing-Country Internationalization:* Developing countries host a significant number of international students. Developing countries seek to attract foreign students to their universities to improve the quality and cultural composition of the student body, gain prestige, and earn income.
- *Individual Internationalization:* Individuals make many key decisions concerning destinations and fields of study. Students, though constrained by immigration regulations, decide whether they will return home following their academic work or stay at home and enroll in the programs offered by foreign education providers. Most of the world's more than 2 million international students are self-funded, that is, they and their families pay for their own academic work. Students are therefore the largest source of funds for international education—not governments, academic institutions, or philanthropies.

TURKEY'S ROADMAP AND INTENTIONS IN ACCEPTING INTERNATIONAL STUDENTS

International student in Turkey, in the Foreign Student Strategy Document prepared in 2012 under the coordination of YTB (Department of Foreign Turks and Relative Communities) and accepted by the International Student Evaluation Board, is described as "A student who is not a citizen of the Republic of Turkey and who is studying on his own account or as a scholarship student for social, cultural and professional development in an educational institution of any grade and branch in Turkey with student visas or special permits." (Inter-university Council of Republic of Turkey, 2016)

Due to its academic, social, cultural, political and economic contributions, international students have been on the agenda of many countries today. In these countries, academic studies are carried out to support the growing international student market, national strategies and policy texts are being prepared and institutional structures are being established, and Turkey is no exception in this regard. Many institutions and organizations in Turkey are working on the internationalization of higher education. The Department of Higher Education of the Ministry of National Education and the General Directorate of Overseas Education, Department of Foreign Turks and Relative Communities (YTB), Turkish Cooperation and Coordination Agency (TIKA), Foreign Economic

Relations Board (DEIK), Ministry of National Education, Yunus Emre Cultural Centers, Foreign Ministry Promotion and Cultural Affairs Department of the Ministry of Foreign Affairs and General Directorate of Immigration Administration of the Ministry of Interior have undertaken different responsibilities in the fields of internationalization of higher education. Comprehensive reports were prepared, workshops and conferences were organized on this framework (Inter-university Council of Republic of Turkey, 2016).

In a report published by Republic of Turkey Ministry of Development (2015), it is stated as follows: "International students become an important means of production and development by staying in the countries they are after their training or return to their countries and as a cultural ambassador they are obliged to bridge the political, social, cultural and commercial areas between the countries and the countries they are visiting. Contribution to the elimination of labor shortages, especially in the countries with declining population and increasingly aging, is the indirect economic gains of internationalization of higher education, with the development of the education sector, the opening of new employment areas and the return of trainees to the countries and the emergence of new markets and commercial partnerships in the long run."

The main motives of Republic of Turkey can easily be noticed by reading the lines above. The very first intention of Turkey is to gain profit via tuition fees and in-economy spending of the sojourner students. Second one is to gain the sympathies of the students they host for years and to make them spread these good emotions by being the cultural ambassadors. Knowing Turkish in intermediate level is a prerequisite to study a Turkish-mediated-program in any Turkish university, just like other countries enforce their language to be learned, and Turkey makes it obligatory to prove that the students already know Turkish or it makes the students enroll in Turkish classes opened within the university they study. Bearing this in mind, it can be deduced that Turkey, like all other countries, tries to spread its official language, and by this way its culture, opinions, way of thinking, and lifestyle.

The general tendencies of the world higher education system which have been expressed in the workshop held on 9-10 April 2016 in Ardahan University are listed in the following items.

- The countries that the international students prefer the most are the ones having the universities teaching in English.
- The biggest student exporters are Asian countries.
- International students concentrate mostly on Master and PhD. programs.
- Some countries have become international centers of attraction in certain areas of science (Inter-university Council of Republic of Turkey, 2016).

Holding workshops and conferences, doing research, and encouraging scholars and governmental bodies to publish reports and scientific papers to spot the trends, changes and difficulties in internationalization of universities around the globe shows us that Turkey is ambitious to take its part in the global market. The most extensive report of a research project done by Republic of Turkey Ministry of Development (2015) gives useful and realistic advices to policy makers, administrators, and scholars about the critical points in Turkish higher education to be improved. The highlighted 7 points and sub points are as follows:

1. *Ensuring effective governance in internationalization:* a national strategy for international students is needed, establishment of a superstructure responsible for internationalization should be assessed, internationalization action plan needs to be prepared, raising awareness of internationalization should be ensured, data and statistics should be produced to increase effectiveness in the decision-making process, establishment of a monitoring and evaluation system for projects and programs to be implemented in the event of globalization should be assessed.
2. *Promotion and Branding Activities:* the Turkish brand needs to be established in the international higher education market, an introduction strategy should be prepared to increase the awareness of the Turkish university system, it is necessary to prepare new materials in the direction of branding activities, in order to watch the promotional materials, study in Turkey portal should be developed to promote, social media needs to be used effectively in the creation and promotion of the Turkish higher education brand, it should be assessed that foreign

representations and consultants operate in international student attraction and promotion, private sector organizations need to be encouraged and encouraged in the context of internationalization, improvements have to be made regarding incentives for foreign currency earning service provided by the public.

3. *Preparing the Higher Education System for Internationalization:* in the context of internationalization, universities need to oversee their strategic plans and prepare action plans, universities should be supported technically in internationalization, training programs need to be diversified to increase the attractiveness of universities, the number of international cooperation and exchange programs in higher education should be increased and improved, a flexible, feasible system of accreditation and equivalence needs to be established, necessary measures should be taken in order for international academicians to be employed more in Turkey, expansion of accommodation opportunities for international students is required, physical conditions and social facilities in the campus and in the country should be improved, alternative solutions should be produced in respect of marriage, the administrative and physical capacities of international student offices need to be upgraded to an official status, periodical experience sharing meetings should be held between student offices, orientation programs for international students should be organized, problems and expectations of international students should be determined, it is necessary to make the activities for the graduates systematic and systematic, the financial support of internationalization activities will contribute to the international student withdrawal of universities, higher awareness of universities to be more flexible in pricing must be evaluated
4. *Review of Student Application, Selection and Admission Processes:* establishment of a common system / portal for the application and acceptance of pupils should be assessed, objectivity, transparency, accessibility and awareness in student selection should be high, flexible, feasible, and just systematic, a flexible implementation of the student admission period should be established.
5. *Legislation and Review of Bureaucratic Transactions:* measures should be taken to minimize the bureaucracy in the procedures that international students should follow, procedures for follow-up visa and residence permit should be facilitated, students who are successful and have contributions to the country should be granted a long-term residence and work permit, and even the way of becoming a citizen should be open, general health insurance provisions for international students need to be kept in mind.
6. *Review of the Scholarship System:* the system of scholarships granted by Turkey needs to be watched, the creation of differentiated and thematic scholarship programs should be assessed.
7. *Handling the Turkish Teaching Issue:* the infrastructure for teaching Turkish language as a foreign language should be established, an examination system needs to be developed in order to identify the levels of international Turkish language skills.

SUMMARY

In this study, globalization and internationalization concepts were described and explained in the context of higher education systems around the world and in Turkey. After a careful literature review, Turkey's roadmap, weak points, and strategies in terms of higher education internationalization are explained and possible solutions and advices were proposed. Recruiting the international students has long been on the agenda of Turkey, and a lot of government divisions have been doing researches, conferences, workshops to enhance the conditions and quality. Reviewing the data, it can be again inferred that Turkey will be the rising star of higher education supplier for international students in the following years.

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INTRINSIC AND EXTRINSIC MOTIVATIONS OF SOCIAL MEDIA USE:COLLEGE STUDENTS PERSPECTIVE

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ABSTRACT
Based on uses and gratifications theory and motivation theory, this study examined how college students' intrinsic and extrinsic motivations of social media use are associated with their social media addiction levels. An online survey was conducted with 220 undergraduate students enrolled in a large, public university in Turkey. The results showed that both extrinsic and intrinsic motivation factors are correlated with college students' social media addiction levels. Specifically, better connecting with others and facilitating interactions with family and friends were the extrinsic motivation factors significantly associated with social media addiction levels. Significant intrinsic motivation factors included killing idle time, finding entertainment, getting away from pressures or responsibilities, and relaxing. The results further indicated that the intrinsic motivation factors are more strongly correlated with college students' social media addiction than the extrinsic motivation factors. The present study contributes to enhancing our understandings of social media use and addiction among college students. Theoretical and practical implications of the findings are discussed.
Keywords: Motivation, Social Media Use, College Student

INTRODUCTION

Social network sites (SNSs) are networked communication platforms in which participants publicly articulate connections and/or interact with streams of user-generated content provided by their connections (Ellison & boyd, 2013). Nowadays, fast-evolving SNSs have dominated most people's lives, allowing users, especially college students to develop personal communication, find entertainment, seek self-status, and achieve information exchange. Along with these major uses and gratifications factors, these platforms have an addictive potential and can have negative psychological impacts – such as social media addiction, which is regarded as a subtype of the Internet addiction. An individual can be seen as being addicted to social media when his/her psychological state, which includes both mental and emotional states as well as his/her scholastic, occupational and social interactions, is impaired by the overuse of social media (Turel et al., 2014).

Most studies before 2010 focused on problematic Internet use (Tokunaga & Rains, 2016). Recently, a growing number of researchers have turned their attention to problematic social media use (Hormes, Kearns, & Timko, 2014; Khumsri, Yingyeun, Manwong, Hanprathet, & Phanasathit, 2015; Ryan, Chester, Reece, & Xenos, 2014; Sriwilai & Charoensukmongkol, 2015). To fill the gap in the literature, this study analyzes what intrinsic and extrinsic motivation factors are associated with college students' level of social media use and addiction based on social media platform as whole.

This research is significant for several reasons. Firstly, Internet addiction along with its subtypes, such as social media addiction, is becoming a major problem as the number of social network sites increases. Secondly, social media addiction hasn't been studied enough to receive its own clinical definition or treatment recommendation. Thirdly, prior research suggested that college students are exposed to a higher risk of Internet addiction because of their vulnerability (Arnett, 2000).

Literature Review

Social media is a group of Internet-based applications that build on the technological foundations of Web 2.0, which allows the creation and exchange of user- generated content (O'Reilly, 2007). It first appeared in late 1990s, and became popular at the year of 2003 with the birth of MySpace, which led to the launch of numerous social media websites such as Facebook, Twitter. Social network sites (SNSs) are a subset of social media that

allows users to create a public profile and interact with other users on the website. Kaplan and Haenlein once classified social media platforms based on their different levels of social presence/media richness (amount of information that is allowed to be transmitted in a given time period) and self-presentation/self-disclosure (the conscious or unconscious revelation of personal information) (Kaplan & Haenlein, 2010). According to their classification, social network sites (e.g., Facebook) are one kind of social media with high self-presentation and medium social presence.

When people think about addiction, they often think of it as involving substances, such as drugs or alcohol. Broadly speaking, addiction is defined as a "compulsive, uncontrollable dependence on a substance, habit, or practice to such a degree that cessation causes severe emotional, mental, or physiological reactions" (Harris, Nagy & Vardaxis, 2014). Nowadays, more and more attention has been paid to behavioral addictions such as gambling, sex, Internet, shopping, video game, plastic surgery, and risky behavior (Grant et al., 2010; Griffiths & Demetrovics, 2012). Among all behavioral addictive traits, the Internet stands out for its relevance in the digital media age and its potential of delivering harmful results to millions as access to the Internet has risen globally ("World Internet Users Statistics," 2015). Problematic Internet use (PIU), an uncontrolled Internet consumption pattern, has been widely studied by communication scholars. A recent meta- analysis reported that over 350 studies have examined PIU (Tokunaga & Rains, 2016). Tokunaga and Rains (2016) identified three conceptual and operational definitions of PIU, they viewed it as substance dependence, an impulse control disorder, and an artifact of relational and relationship-building resources deficits (Tokunaga & Rains, 2016).

With the rapid development of the Internet, more research has discussed other subtypes of Internet addiction. Young (2009) differentiated between three subtypes of Internet addicts: excessive online gaming, online sexual pre-occupation, and e- mailing/texting (K. Young, 2009). Social networks can be viewed as one type of online activity based on emailing/texting. In one study, students classified as Internet-addicted used the Internet more for social functions than students considered non-addicted (Kesici & Şahin, 2009).

Beard once pointed out that an individual is addicted when an individual's psychological state, which includes both mental and emotional states, as well as their scholastic, occupational and social interactions, is impaired by the overuse of the medium"(Beard, 2005). Such a definition can also be used to define social media addiction. Turel's research provided some similar insight into this issue; he suggested that while there is no set criteria for what constitutes excessive or addictive use of social media platforms, use that severely interferes with other important priorities, such as school or work, is a warning sign of addiction (Turel, He, Xue, Xiao, & Bechara, 2014). This indicator can be used as one criterion, yet how to exactly define "social media addiction" is an open question.

One of the biggest challenges in studying social media addiction is that there is currently no accepted set of criteria to measure it. Previous studies tend to use inconsistent criteria, which leave it hard to make comparisons across studies (Alabi, 2013; Andreassen, Torsheim, Brunborg, & Pallesen, 2012; Hormes et al., 2014). Most of the criteria were first used to measure other behavioral addiction such as pathological gambling, then were modified to measure Internet addiction, and finally were adapted to measure social media addiction.

Young (1998) developed the Internet Addiction Diagnostic Questionnaire (IADQ), an eight-item questionnaire that was modified from pathological gambling criteria to provide a screening instrument for addictive Internet use (K. S. Young, 1998). Following Young, Brenner developed the Internet-Related Addictive Behavior Inventory (IRABI) with 32 true-or-false questions (Brenner, 1997), and Morahan-Martin and Schmacher construced the Pathological Internet Use (PIU) scale with 13 yes/no questions (Morahan-Martin & Schumacher, 2000).

When it comes to measuring social media addiction, Alabi (2013) used the Facebook Addiction Symptoms Scale (FASS) to investigate the Facebook addiction level among undergraduates in a selected university (Alabi, 2013). FASS is a 15-item, three- section scale based on Young's Internet Addiction Scale. Items were developed under several categories including preference for social network site, loss of control, preoccupation, negative life consequences, and withdrawal. Hormes et al. (2014) modified a set of measures of alcohol craving and problem

drinking to capture symptoms related to behavioral addiction to online social networking. In addition to these modified instruments, this study also applied some widely used and well-validated measures including Young Internet Addiction Test (YIAT), and Acceptance and Action Questionnaire—II (AAQ-II) (Hormes et al., 2014). Wilson et al. (2010) developed the Addictive Tendencies Scale, which has three items reflecting salience, loss of control, and withdrawal (Wilson et al., 2010). Based on the Addictive Tendencies Scale, Andreassen and colleagues (2012) developed and employed an instrument to test Facebook addiction in both epidemiological studies and clinical trials – the Bergen Facebook Addiction Scale (BFAS). BFAS is a self-report questionnaire, comprised of 18 items, three for each of the six core features of addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Participants scored on a five-point frequency scale, ranging from 1 (very rarely) to 5 (very often). In their study, BFAS was constructed together with several other standardized self-report scales (Addictive Tendencies Scale, Online Sociability Scale, Facebook Attitude Scale, NEO–FFI, BIS/BAS scales, and Sleep questions) (Andreassen et al., 2012). Also, BFAS was developed with a college student sample and then commonly applied in recent studies that investigate students' social media addiction (Khumsri et al., 2015; Akter, 2014). Thus, this study modified BFAS to measure college students' social media addiction level.

Theoretical Framework

Uses and Gratifications Theory

This research is based on the uses and gratifications theory (U&G) and motivation theory. Uses and gratifications theory (U&G) is a theoretical framework that is used to study how media, including social media, are utilized to fulfill the needs of individual users with different goals. Individuals distinguish between different functions of media based on the needs they expect to satisfy through media use (Katz, Haas, & Gurevitch, 1973). The U&G approach allows technology and media researchers to explore users' various goals when engaging with media, allowing for a better understanding of differing behaviors, outcomes, and perceptions. Most researchers who study social media use applied this theory to discover the reasons why individuals use social media and what gratifications they receive as a result (Whiting & Williams, 2013; Harridge-March, Dunne, Lawlor, & Rowley, 2010; H.-T. Chen & Kim, 2013).

There are several important assumptions of U&G. Firstly, people are active participants who purposively select their media content, influenced by their motivations and past media gratifications. Secondly, social and psychological characteristics, societal structure, social groups and relationships, and personal involvement can mediate communication behavior and its effects. Finally, people are more influential than the media in the media effects process (Bondad-Brown, Rice, & Pearce, 2012). Based on the assumptions underlying U&G, Rubin (2002) pointed out that the two core elements of U&G are motivations and audience activity (Rubin, 2002). Motivations affect not only the selective and active manner in which we seek and use media, but also the subsequent gratifications and possible media effects as people anticipate as well as form expectations about media content (Bondad-Brown et al., 2012). As for audience activity, it refers to the utility, intentionality, selectivity, and involvement of the audience with the media (Levy & Windahl, 1985), which can be understood as sharing, recommending, and discussing content with others. Among all different forms of media, social network sites provide users with a high level of audience activity.

Urista et al. (2009) studied different forms of MySpace and Facebook gratifications including social gratifications (being in contact with friends and family; meeting people with the same interests; establishing social relationships; keeping in touch with old friends; and popularity) and communicational gratifications (the capacity of individuals to manage their communication; the possibility of getting in contact with new profiles) (Urista, Dong, & Day, 2009). Results indicated that social media generates a high degree of satisfaction that leads to a continuous manner and makes people keep returning to these social network sites. Wan (2009) examined the relationship between SNSs addiction and uses and gratifications. Results revealed that Xiaonei.com (a campus-based SNS in China) addiction was significantly associated with the motives of socialization and relationship building (Wan, 2009). Exploring the relationship between gratifications sought from SNSs and problematic SNS use, Chen and Kim found that three types of gratifications (diversion, self-presentation, and relationship building) were positively related to problematic SNS use (H.-T. Chen & Kim, 2013). Also, Papacharissi and Mendelson (2011) referred the gratification of passing time which involved checking of the News Feed for new updates or playing games as

"ritualized," and indicated that it reflected "the addictive nature of the genre" (p.226). Ryan (2014) also mentioned that the gratification of passing time may be related to Facebook addiction, but further research is required to prove that. In addition, previous research has shown that Facebook use was positively associated with motivations for social capital, access to resources, and peer support (Ellison, Steinfield, & Lampe, 2007; Oh, Ozkaya, & LaRose, 2014; Tazghini & Siedlecki, 2013; Warren, Sulaiman, & Jaafar, 2015).

In addition to the traditional uses and gratifications research in mass communication studies, in 2015, Atkin et al. integrated U&G with diffusion and technology adoption model within the new media environment (Atkin, Hunt, & Lin, 2015). Specifically, they examined how uses and gratifications that attract individuals to particular technologies affect the diffusion process of such technologies. Research on the diffusion of technological innovation first appeared in the 1970s. Rogers once explained the five stages in the innovation-decision process model: 1) obtaining knowledge of an innovation; 2) forming an attitude towards an innovation; 3) deciding whether to adopt or reject an innovation; 4) implementing the new innovation, and 5) confirmation of the decision (Rogers, 2003). In Atkin et al. (2015)'s paper, the process was explicated with younger audiences' social media use – "people develop an interest in an innovation that has particular 'uses' conveyed to them in a medium or over a channel access for similar 'uses' (or gratifications)." (p.627) Uses and gratifications theory has been widely used to study new technology diffusion because of its emphasis on audience activity and its ability to explain motives for media behavior (Charney & Greenberg, 2002; Ruggiero, 2000). However, Krishnan and Hunt once pointed out that uses and gratifications research failed to analyze the motives in regard to antecedents or consequences (Krishnan & Hunt, 2015). In addition, in prior research, the difference between "needs" and "motives" was not clarified sufficiently enough. With the integration of uses and gratifications theory and adoption theories, some of these issues can be resolved (Atkin et al., 2015).

Despite the criticism of theoretical simplicity and methodological limitations attributed to uses and gratifications theory, there is a general agreement that typologies of this theory provide researchers with an initial reference on which to conduct empirical studies to examine the uses and reasons for use of social media (García-Jiménez, López- Ayala-López, & Gaona-Pisionero, 2012). According to de Moragas Spa, taking uses and gratifications into consideration will help us frame and understand the meanings and objectives of use of the media, as well as introduce a series of variables that must be taken into consideration (de Moragas Spa, 1994).

Motivational Theory

Motivation is the force that initiates, guides, and maintains goal-orientated behaviors, and it involves the internal processes that give behavior its energy and direction. Energy refers to the strength, intensity and persistence of the behavior concerned. Direction gives the behavior a specific purpose (Lee, Cheung, & Chen, 2005). Generally, researchers have distinguished between different types of motivation based on the different reasons or goals that have given rise to an action. The most basic distinction is between intrinsic motivation (e.g., perceived enjoyment and fun), which refers to doing something because it is inherently satisfying rather than for some separable consequences that may be anticipated. In comparison, extrinsic motivation (e.g., perceived usefulness) refers to doing something because of its instrumental value that a person believes would enhance his or her performance (Davis, 1989; Deci & Ryan, 1985). Intrinsic and extrinsic types of motivation have been widely used in previous research to explain individuals' behaviors (Lee et al., 2005; Lin & Lu, 2011; Teo, Lim, & Lai, 1999). In addition to the individual's perceptions and beliefs, social influences may also affect behavior (Ajzen & Fishbein, 1980). The Technology Acceptance Model (TAM) developed by Davis first posited two external variables that are primarily related to people's computer acceptance behaviors, perceived usefulness and perceived ease of use (Teo et al., 1999). Deci and Ryan once clarified the distinction between extrinsic and intrinsic motivators of behavior. They suggested that when it comes to microcomputer use, individuals may be motivated because of the intrinsic rewards derived (enjoyment and fun), the perceived benefits (usefulness), or external pressures (social pressure) (Deci & Ryan, 1975). Igbaria's study extended prior research by integrating these three reasons underlying the use of microcomputers and examining simultaneously the relative influence of these three motivators (Igbaria, Parasuraman, & Baroudi, 1996). Results showed that perceived usefulness is the principal motivator (Igbaria et al., 1996). Davis found that both extrinsic (usefulness) and intrinsic (enjoyment) factors influence the motivation to use information technology system (Davis et al., 1992). Teo et al. modified Igbaria et al.'s study by examining intrinsic and extrinsic motivations in the context of the Internet instead of

microcomputer. They found that while perceived usefulness had consistently strong effects on all usage dimensions (frequency of Internet usage, daily Internet usage and diversity of the Internet usage), perceived ease of use and perceived enjoyment affected each specific usage dimension differently (Teo et al., 1999). Recently, Lin and Lu's study demonstrated that extrinsic benefit and intrinsic benefit are components of individuals' perceived benefit in social network sites.

Specifically, the results showed that enjoyment (intrinsic motivation) is the most influential factor in motivating people's continued use of SNS, followed by number of peers and usefulness (extrinsic motivation) (Lin & Lu, 2011).

In addition to the perceived usefulness and perceived enjoyment, when it comes to studies that examine the factors that motivate individuals' behaviors, perceived complexity and perceived ease of use were frequently examined as important variables. Webster and Martocchio suggest that enjoyment in using computers depends strongly on perceived complexity or ease of use (Webster & Martocchio, 1992). Davis (1989) defined the perceived ease of use as "the degree to which a person believes that using a particular system would be free of efforts" (p. 320).

By combining U&G and motivation theory, this research investigates the uses and gratifications factors that attract college students to use social media, and the specific intrinsic and extrinsic factors that college students have in using social media, and how these factors lead to potential social media addiction.

METHOD

Many previous studies on Internet addiction or social media have mostly used an online survey approach (Andreassen et al., 2012; Hormes et al., 2014; Lin & Lu, 2011; Sriwilai & Charoensukmongkol, 2015). Although online surveys have been found to have some weaknesses (such as bias and errors due to self-report), they offer the advantage of reaching people who regularly use the Internet, a population vital to this research topic (G. M. Chen, 2011). Couper concluded that if a survey targets Internet users only, it is a good decision to employ the Internet survey mode (Couper, 2000).

Empirical data for this study come from an online survey with 220 college students who enrolled in a large, public university in Turkey. The questionnaire used in this research contained two main parts. The first part was designed to examine participants' social media use and gratifications, informed by the results of Lin & Lu's study (Lin & Lu, 2011) and Whiting and Williams' research (Whiting & Williams, 2013). The second part aimed to measure participants' social media addiction level. This part was modified from the Bergen Facebook Addiction Scale (BFAS), which was originally developed to assess Facebook addiction. Undergraduate students ages 18-24 were chosen as a sample not only because they are the largest group on social media but also because of college students' excessive dependence on social network sites (Perrin, 2015).

FINDINGS

Demographics of Participants

A total of 220 undergraduate students aged from 18 to 27 (M = 19.72, SD = 1.481) completed the questionnaire. Most of the participants were freshman (44.7%, n = 98), followed by sophomore (29.7%, n = 65), junior (16.8%, n = 37), and senior (8.6%, n = 19). About 93.6% (n = 206) of the survey respondents were Turkish students and 6.4% (n = 14) were international students. The proportion of female participants (61.4%, n = 135) was higher than that of male participants (38.6%, n = 85).

Table 1. Demographics of Participants

	Frequency	Percentage
Gender		
Female	135	38.6%
Male	85	61.4%
Total (*N*)	220	100.0%
Year in college		
Freshman	98	44.7%
Sophomore	65	29.7%
Junior	37	16.9%
Senior	19	8.7%
Total (*N*)	219	100.0%
Age		
18	40	18.2%
19	76	34.5%
20	55	25%
21	27	12.3%
22	9	4.1%
23	6	2.7%
24	6	2.7%
27	1	.5%
Total (*N*)	220	100.0%
International/not international		
International	14	6.4%
Domestic	206	93.6%
Total (*N*)	220	100.0%

College Students' Online Activity and Social Media Usage

As shown in Table 2, most survey respondents (74.4%, n = 162) reported spending 1-4 hours on social media (Facebook, Twitter, Instagram, etc.) during a typical day. About 15.2% (n = 33) of the participants said they spent 5-8 hours on social media on a typical day, followed by 6.4% (n = 14) spending less than 1 hour, and 4.2% (n = 9) more than 9 hours. When it comes to the amount of time spent on their overall online activities (using social media, Google search, online shopping, etc.), 56.7% (n = 123) students reported spending 1-4 hours, 33.2% (n = 72) 5-8 hours, 6.5% (n = 14) more than 9 hours, and 3.7% (n = 8) less than one hour. These results suggest that the survey participants spend a significant amount time a day online in general and on different social media sites.

Table 2. Time Spent on Social Media and Internet on a Typical Day

	Frequency	Percentage
Average time spent on social media		
Less than 1 hour	14	6.4%
1 hour	30	13.8%
2 hours	53	24.3%
3 hours	44	20.2%
4 hours	35	16.1%
5 hours	16	7.3%
6 hours	8	3.7%
7 hours	3	1.4%
8 hours	6	2.8%
9 hours	1	.5%

10 hours	6	2.8%
12 hours	2	.9%
Total (*N*)	218	100.0%
Average time spent online		
Less than 1 hour	8	3.7%
1 hour	25	11.5%
2 hours	37	17.1%
3 hours	29	13.4%
4 hours	32	14.7%
5 hours	39	18.0%
6 hours	15	6.9%
7 hours	8	3.7%
8 hours	10	4.6%
9 hours	1	.5%
10 hours	7	3.2%
12 hours	5	2.3%
14 hours	1	.5%
Total (*N*)	217	100.0%

Table 3 shows how frequently the survey respondents use different social media sites. This was measured on a seven-point Likert-type scale, and the higher mean score indicates being more frequently used by the participants. The findings suggest that the most popular social media site among the survey respondents is Snapchat (M = 6.18, SD = 1.82). Indeed, Snapchat has quickly emerged as one of the most popular social media sites among college students (Mediakix, 2016). Snapchat was followed by Facebook (M = 6.06, SD = 1.61), Instagram (M = 5.81, SD = 2.07), YouTube (M = 4.91, SD = 1.88), Twitter (M = 4.73, SD = 2.56), Pinterest (M = 2.70, SD = 2.07), LinkedIn (M = 1.82, SD = 1.39), WhatsApp (M = 1.58, SD = 1.57), Skype (M = 1.56, SD = 1.12), Yik Yak (M = 1.51, SD = 1.24), WeChat (M = 1.31, SD = 1.24), and Sina Weibo (M = 1.13, SD = .78). The results are largely in alignment with other reports that show the sustained popularity of Facebook and Instagram among young adults (Lenhart, 2015).

Table 3. Use of Different Social Media Platforms

	Mean (*M*)	Std. Deviation (*SD*)
Snapchat	6.18	1.82
Facebook	6.06	1.61
Instagram	5.81	2.07
YouTube	4.91	1.84
Twitter	4.73	2.56
Pinterest	2.70	2.07
LinkedIn	1.81	1.39
WhatsApp	1.58	1.57
Skype	1.56	1.12
Yik Yak	1.51	1.24
WeChat	1.31	1.24
Sina Weibo	1.13	.78

Note: All items are scored on the following scale: 1: *Never*, 2: *Less often*, 3: *Every few weeks*, 4: *1-2 days a week*, 5: *3-5days a week*, 6: *About once a day*, 7: *Several times a day*.

Social Media Uses and Gratifications

Social media uses and gratifications were measured on a seven-point Likert-type scale, and higher scores indicated more important reasons for participants to use social media (Table 4). This research found that the most important

reasons for college students to use social media was to kill idle time (M = 6.36, SD = 1.06).

Table 4. Social Media Uses and Gratifications

I use social media…	Mean (*M*)	Std. Deviation (*SD*)
To kill idle time	6.36	1.062
For entertainment	6.26	1.128
Because its accessibility	5.98	.970
To connect with others	5.93	1.370
To acquire information	5.92	1.297
To interact with friends	5.86	1.369
To keep up with others	5.85	1.204
To learn new things	5.63	1.291
To get away from pressures	5.06	1.596
To make comments	5.03	1.576
To relax myself	4.90	1.462
To interact with family	4.69	1.687
To express my opinions	4.65	1.550

Note: The scale used ranged from 1(strongly disagree) to 7 (strongly agree).

Social Media Addiction

For this research, an instrument revised from the Bergen Facebook Addiction Scale was used to measure social media addiction. The revised instrument included 19 items that reflected six core elements of addiction: salience, mood modification, tolerance, relapse, withdrawal, and conflict. Each survey participant was asked to respond to all the items on a seven-point Likert-type scale. Higher scores indicated higher social media addiction levels (Table 5). To assess the reliability of the instrument, Cronbach's alpha test was used (Tabachnick & Fidell, 2012). Cronbach's alpha test indicated a good level of reliability and stability for the measurement items (α = .916).

Among all items, the three highest scores appeared at the first two dimensions: salience and tolerance: "I have spent more time on social media than I initially intended" (M = 5.65, SD = 1.40); "I have though a lot about what has happened on social media recently" (M = 4.53, SD = 1.60), and "I have felt an urge to use social media more and more" (M = 4.40, SD = 1.75). The three lowest scores appeared at salience and conflict: "I have ignored my family because of social media" (M = 2.99, SD = 1.89); "I have ignored my friends because of social media" (M = 2.84, SD = 1.79); and "I have thought about how to spend more time on social media" (M = 2.73, SD = 1.48).

The Intrinsic and Extrinsic Motivation Factors in College Students' Social Media Use

We investigated the specific intrinsic and extrinsic motivation factors which college students have in using social media. For this five extrinsic motivation factors and four intrinsic motivation factors were identified from the prior uses and gratifications items. The extrinsic motivation factors are: to acquire information, to better connect with others, to facilitate interactions with family, to facilitate interactions with friends, and to learn new things. The intrinsic motivation factors include to find entertainment, to kill idle time, to get away from pressures or responsibilities, and to relax.

In Table 5, items with higher mean scores suggested more important factors in motivating college students using social media. The most important extrinsic motivation factor is to better connect with others (M = 5.92, SD = 1.37).

Table 5. The Intrinsic and Extrinsic Motivation Factors in College Students' Social Media Use

Extrinsic motivation factors	Mean (M)	Std. Deviation (SD)
To better connect with others	5.92	1.373
To acquire more information	5.90	1.312
To facilitate interaction with friends	5.86	1.362
To learn new things	5.64	1.286
To facilitate interaction with family	4.70	1.684
Intrinsic motivation factors		
To kill idle time	6.37	1.057
To find entertainment	6.25	1.131
To get away from pressures or responsibilities	5.06	1.604
To relax	4.91	1.464

Note: The scale used ranged from 1 (strongly disagree) to 7 (strongly agree).

Correlations between Intrinsic/Extrinsic Motivation Factors and Social Media Addiction

A social media addiction index was computed by adding every score of social media addiction items and dividing it by item number (n = 19). As shown in Table 6, the results supported this hypothesis. Of the five different extrinsic motivation factors, three showed statistically significant correlations with the social media addiction index. They are: better connect with others ($r = .16$, $p < .05$); facilitate interactions with family ($r = .20$, $p < .01$); and facilitate interactions with friends ($r = .17$, $p < .01$). All the intrinsic motivation factors were significantly related to social media addiction: entertainment ($r = .21$, $p < .01$); kill idle time ($r = .20$, $p < .01$); get away from pressures or responsibilities ($r = .54$, $p < .01$); and relax ($r = .47$, $p < .01$).

Table 6. Correlations between Different Motivation Factors and Social Media Addiction Level

	Addiction Index	
	Pearson Correlation (*r*)	Sig. (2-tailed)
Extrinsic motivation factors		
Acquire more information	.098	.153
Better connect with others	.160*	.019
Facilitate interactions with family	.195**	.004
Facilitate interactions with friends	.171*	.012
Learn new things	.130	.057
Intrinsic motivation factors		
Entertainment	.211**	.002
Kill idle time	.196**	.004
Get away from pressures or responsibilities	.541**	.000
Relax	.473**	.000

Note: *$p < .05$; **$p < .01$.

We further examined correlations between the social media addiction index and the extrinsic/intrinsic motivation index. The extrinsic index was computed by adding every score of extrinsic motivation factor items and dividing it by the number of the items ($n = 5$); the same method was used to create the intrinsic motivation index. Reliability tests were conducted for the two indexes. The reliability score (□) for the extrinsic motivation index and the intrinsic motivation index was .80 and .64, respectively. These values are acceptable for an exploratory research study like this one. The intrinsic index score ($M = 5.67$, $SD = .91$) was higher than the extrinsic index score ($M = 5.60$, $SD = 1.058$). A correlation test showed that the intrinsic motivation index ($r = .56$, $p < .001$) is more strongly correlated with the social media addiction index than the extrinsic motivation index ($r = .21$, $p < .001$).

CONCLUSIONS

Nowadays, rapidly developing social media has gained substantial pervasiveness and become an integral part of people's lives, especially for young adults. The development of smartphones and prevalence of free social media smartphone applications leave social media even more accessible and available to users. The multiformity of social media – for example, micro-blogging sites like Sina Weibo, video-sharing sites like YouTube and social network sites like Facebook and Twitter – provides users with various gratifications. With social media, people can easily build and maintain social connections including both personal and professional networks, have more access to information than ever before, and achieve information exchange and sharing in an easier manner. In addition, they find different forms of entertainment via various social media sites. For young adults like college students, in addition to potential benefits mentioned above, use of social media can, to some extent, build up their self-confidence and self-esteem, and help them with the identity exploration during their adolescence.

The main objective of this research was to explore specific intrinsic and extrinsic motivation factors that college students have in their social media use and to analyze how these intrinsic and extrinsic factors are associated with college students' levels of social media addiction. . Uses and gratifications theory and motivation theory (Katz, Haas, & Gurevitch, 1973; Bondad-Brown, Rice, & Pearce, 2012; Lee, Cheung, & Chen, 2005; Davis, 1989; Deci & Ryan, 1985) provided theoretical frameworks for this study. Empirical data come from an online survey of 220 college students enrolled in a large, public university in Turkey.

We first examined the uses and gratifications in college students' social media use. The results showed that diversionary gratifications (kill idle time; entertainment), social gratifications (connect with others; facilitate interaction with friends; keep up with what others are doing), and instrumental gratifications (information seeking, learning new things) are the most important uses and gratifications in college students' social media use. Among all these use and gratification themes, diversionary gratifications stand out with the highest score. This reflects college students' strong incentives to pursue self-reactive, which can be seen as goal-orientated efforts to adjust one's own internal psychological states (Song et al., 2004). The diversion college students obtained is a deciding factor of their intention and continuous intention of using social media, which is consistent with Kuss and Griffiths (2011)'s recognition of the relationship between uses and gratifications and social media addiction. In addition, the uses and gratifications found in this study also indicate the intrinsic and extrinsic motivations in college students' social media use.

This study found that both intrinsic and extrinsic motivators are associated with college students' social media addiction levels. Specifically, three extrinsic motivation factors (to better connect with others; to facilitate interactions with family; and to facilitate interactions with friends) showed statistically significant correlations with the social media addiction index. The other two extrinsic motivation factors (to acquire information and to learn new things) were not statistically significantly related with the social media addiction index. This finding indicated that even though information seeking and learning new things can, in a way, stimulate college students using social media, the specific extrinsic motivation factor that stimulates college students becoming addicted to social media is SNS's social interaction function. In addition, results showed that all the intrinsic motivation factors (entertainment, kill idle time, get away from pressures or responsibilities, and relax) were correlated with social media addiction. The findings on intrinsic and extrinsic motivation factors supported Song et al. (2004)'s proposition that whether the pleasurable outcomes are obtained completely "inside" the media system in fulfillment of a process gratification like diversion (intrinsic motivations) or instrumentally "through" the media system such as connecting with others or learning new things (extrinsic motivations) both motivations can lead to media addiction.

The present study confirmed the popularity of social media among college students. Most college students use more than one social media site on a daily basis. The majority of the undergraduate participants in this study reported that they spent two to five hours every day on social media, which accounts for a considerable amount of the total time they spend online on a typical day. Snapchat, Facebook, and Instagram have been identified as the most frequently used social network sites among college students, who indicated that they logged on Snapchat

and Facebook at least once a day, and checked Facebook about three or five days a week.

Furthermore, we identified the specific intrinsic and extrinsic motivation factors that college students have in using social media, and confirmed the positive relationship between these motivators and social media addiction levels. It is shown that the benefits individuals obtain from social media such as better connecting with others, interacting with family and friends, and finding entertainment actually have the potential to lead people to become addicted to social media. Thus, while enjoying all the benefits that social media brings to our lives, users should always keep in mind it is the same thing that might make it difficult to control their excessive uses of social media.

Moreover, this study found that compared with extrinsic motivators, intrinsic motivators have stronger influence on college students' development of social media addiction. In addition to having fun, significant intrinsic motivation factors in effecting people's social media addiction levels also included getting away from social responsibilities and realities.

In conclusion, this research is expected to provide both theoretical and practical implications to the area of social media addiction. Theoretically, the study puts forward how motivation theory can be applied to study social media addiction. Furthermore, this research provides an example of how to combine motivation theory with uses and gratifications theory when examining the factors that stimulate college students using social media, and explains the associations between social media uses and gratifications and social media addiction. Practically, the findings provide insight on how and why nowadays social media is being more and more abused by college students. In addition, the results bring up practical suggestions on how to effectively prevent college students from becoming addicted to social media, such as offering appropriate guidance for college students to deal with social responsibility and reality pressures.

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USABILITY AND QUALITY TESTS IN SOFTWARE PRODUCTS TO ORIENTED OF USER EXPERIENCE

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ABSTRACT
During the recent years, due to the development of information and communication technologies, users are faced with software products with different structures, functions and designs in terms of many services provided by the internet environment. Accordingly, user expectations are constantly changing and developing applications with only technically perfection are not sufficient for product success. In addition, differentiated product designs have led to the emergence of the concept of usability in accordance with the user's experience and need to determine how functional designs are. All these developments add value to the software products at the point of usability and user satisfaction. In this study, basically menu hierarchy and navigation maps datas were obtained by using analytical tools such as Optimal Workshop, Optimizely and Visual Website Optimizer in the enterprise application. By analysing the obtained data, the hierarchical structure, completion grade and duration of the tasks have been evaluated. In consequence of the analysis studies with the tasks assigned to the users, the users have been determined through the success/failure rates and completion times of each tasks. As a result, the product design has been designed to be focused on the user by assessing usability problems.
Keywords: User Experience, Quality Oriented Design, Usability Tests

INTRODUCTION

User needs have become part of the software and interface development process in conclusion of the rapid development of information technologies over time and the increasing dependence on computer in all fields of the society (Battleson, Booth, & Weintrop, 2001). Many web sites in the web are getting to reach for a dimension by serves countless areas. Consequently it's been needed to work on the availability of web pages. Software usability testing is an important methodology that enables ease of using the applications by evaluating intuitive considerations of the target crew (Black, 2015). The realization of usability tests facilitates the identification of problems on applications and allows for continuous improvements. Jacob Nielsen claims in his study which called "Designing Web Usability" that a site with the best usability will always win competition among other websites (Nielsen, 1999). It's proving the fact that of the usability related with popularity on the web site. But doesn't guarantee the success of the web site (Spool, Sconlong, Schroeder, Snyder, & DeAngelo, 1997). The Honeycomb Model that determines the value of Morville's website and aggregates user experience to seven separate components has been presented in Figure 1 (Morville, 2004).

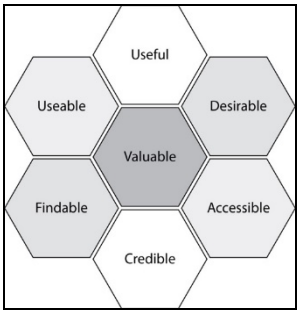

Figure 1: Honeycomb Model

Useful:
In the honeycomb model, it's been emphasized that the first and the most important thing to create value for the website is the usefulness. Websites has been deemed worthwhile to meet any problem or needs for website visitors (Morville, 2004).
Usable: The Standart ISO 9241-11 has been defined "a product can be used by certain users in an effective, efficient and satisfying way to achieve certain objectives within a given usage context (Leventhal & Barnes, 2007).
Desirable: It's about how the design of the product influences the user experience. The first impression and image that the website creates in the eyes of the users is one of the important elements that make the product more powerful and preferable among users (Morville, 2004).
Accesible: With the proper design and development of websites, internet users are able to obtain information and improve their ability to perform certain functions. Accessing the desired content and directing it to the site are factors that determine the preference of the sites.
Findable: Ability of users to perform their operations on a system in a short time depends on the hierarchical navigation structure. In spite of the problems on the interface, system should be designed so that the users can try different solutions by making sudden decisions and continue their operations.
Credible: Products and services offered by the company, especially the company itself need to make a reliable impression in the eyes of the users.
Valuable: Developed products represent the benefits that are provided both to the companies and to the users who use that product. Products offered to the users without value are probably lose importance over time.

In Jacob Nielsen's usability model (Nielsen, 1994), "System Acceptability" is used as part of five different dimensions. Social acceptability in the model shown in Figure 2; all legal and ethical issues, the comparability and trustworthiness of products, usefulness; refers to the benefits of providing users with content depending on the usability of the web pages. Usability in this model consists of five factors; easy to learn, efficient to use, easy to remember, minimum error rate and satisfaction.

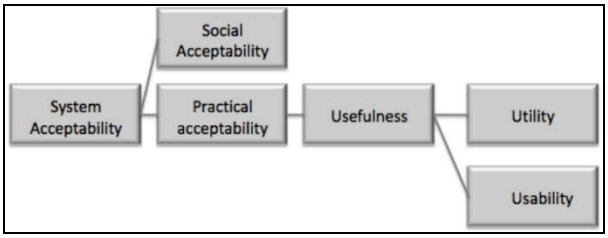

Figure 2: Nielsen's Usability Model

METHOD
Usability has been defined as easy of use, learnability, productivity, mindfulness, error prevention and user satisfaction (Nielsen, 1994). According to the International Standardization Organization, usability has been represented as; The time spent in achieving the specified goals (Efficiency), and the dimension of acceptable levels of users' systems, by means of the use of a system (Efficiency-Effectiveness) (Bevan, Carter, & Harker, 2015). Usability testing methods have been performed to evaluate any system according to the opinions and thoughts of users, to design easier systems and to increase user satisfaction level. Different types of problems can be observed through the application of usability tests and applications or web sites with user-friendly interfaces can be developed as a result of the findings (Rubin & Chisnell, 2008).There are three different classification methods to measure the usability of system including effectiveness, efficiency and satisfaction (Bevan et al., 2015). The tests conducted are aimed at improving these three criteria.

Usability Tests
Products developed to serve a certain purpose in the direction of user needs and expectations are generally used by one or more users. The main key point in the product development process is to ensure that users reach their goals with as little error rate and maximum satisfaction level as possible about the product offered to them. Designing an effective and quality user interface is crucial to increase user satisfaction level. User interfaces are sum of design decisions that are effective for users to use a product (Bağış, 2002). When developing interface designs, the goal is to archieve user-product integration, resulting in a smoother, more useful and more efficient product (Bağış, 2002). The evaluation of the usability of the interface designs has been made in two different ways, intuitive and real user tests. The testing and implementation of interface designs on a intuitive assessment are often made based on the knowledge and experience of experts (designers). When the experience is inadequate, the design is assessed according to ergonomic approaches, standarts and usability criteria (Bağış,

2002). Another method used in the evaluation of interface designs is the tests made with real users. In this method, the performance of the design can be obtained by evaluating the interactions of the users with the interface designs. Although a product is well designed, all of the variations that may occur during it's use may not have previously though (Bağış, 2002). In this point, user testing is often used as an evaluation criterion for uncovering these errors and the user's product approach. User experience testing is conducted to measure users' behavior when using a particular product. These tests are commonly used on a given system to determine what features are unnecessary and how well they work on application interfaces while performing certain tasks assigned to them. To provide a better experience for users, many different types and functional test methods are used in the execution of usability tests. These tests methods are such as eye tracking, tree test, first-click test, A/B test, etc. In this study, tree and first-click tests were applied in determining the usability problems that occured in the interface and when the menus used in the application were not hierarchically set correctly and the users performed the pre-determined tasks on the designs, the focuses and clicks on the screen were obtained and the designs belonging to the first area were obtained. As a result of these test methods , user-oriented interfaces have been created.

1. Tree Test

The tree test is a method used to measure findability of menu items on any website or mobile application (Kantar, 2015). The test results obtained from the users are used as a result of determining the accuracy of the navigation structures depending on the hierarchical structure of the system.

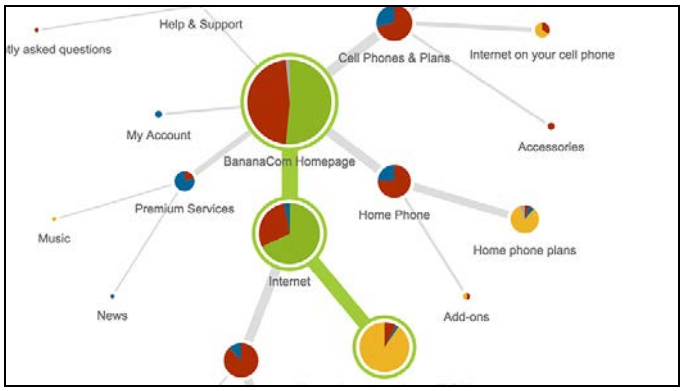

Figure 3- Tree Test Sample ("Tree Testing Tool - Optimal Workshop")

2. First-Click Test

By performing the first-click test, the first object or region's click-through map data has been obtained on the application interfaces in the direction of the tasks assigned to the user. The purpose of this test is to determine the real behavior of the users and prepare the basis for the creation of new design plans.

Figure 4- First-Click Test (Jessica Torres, 2012)

APPLICATION AND FINDINGS

Usability tests such as tree and first-click were carried out on BNet application developed in Detaysoft ("Detaysoft - BNet"). BNet is an application that enables the personnel in the company to communicate with each other and to follow and manage the works, plans and daily activities of the personnel. The findings obtained on the basis of the tests performed are expressed on the following images.

1. Tree Test

The purpose of applying the tree test on the BNet application is that the application has a lot of subcategories and screen displays depending on the presence of several modules that perform different functions. In Figure 5, the findings of the navigation map data of the task *"Where would you like to reach under the task of your colleagues that you have already taken?"* has been expressed in the following image.The test was performed with 10 people and 5 of the test users couldn't search for the task under the *"Personal"* menu. 3 of the remaining 5 people searched under *"Quick Access"* and 2 others in the *"Shortcuts"* menu.

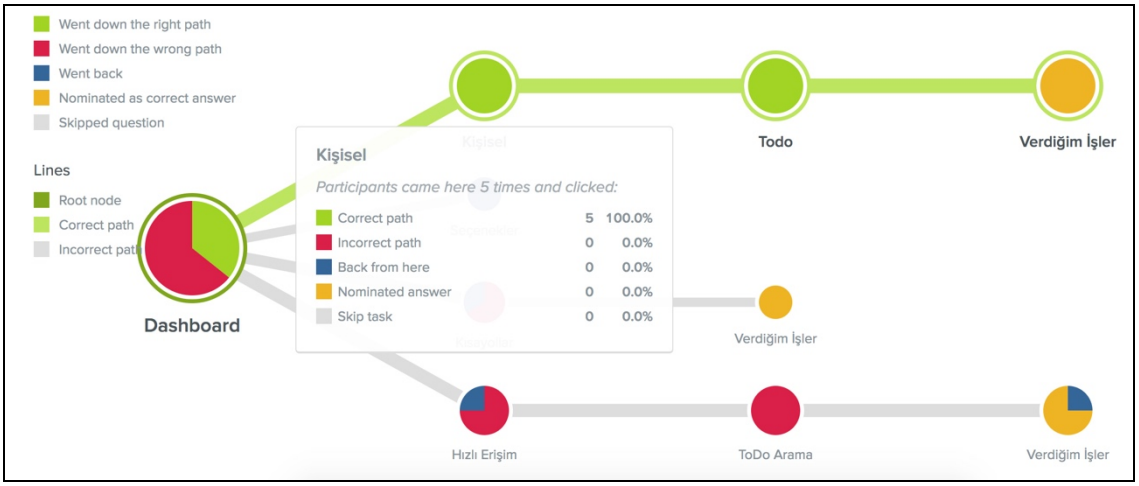

Figure 5: Findings of the tree test

As shown in the Figure 5, the most important factors to be considered in tree test studies are correct path, incorrect path and back from here. Correct path; the user's moves in accordance with the menu hierarchy that designer's/designers' set up, incorrect path; the user's relative navigation within the different menu items, while returning is the rate at which users leave after clicking on the main tree menu. 50% success rate and 50% error rate were obtained as a result of the test applied. Success rates are aimed to achieving consistently high results in order to give users a better experience. This study suggests that different variations should be designed to achieve higher success rates in menu hierarchies when the behavior of users is taken into consideration.

2. First-Click Test

By performing the first-click test on the application, it's possible to determine the behavior of the users regarding the interface design. The findings of the task *"Where did you first click on the application to view any user's plan activity or work?"* are described in Figure 6. The test was performed with 10 users and 7 test users were found to click on region specified area on the interface with 70% success rate. The remaining 30% showed that they could complete the task by clicking on different areas.

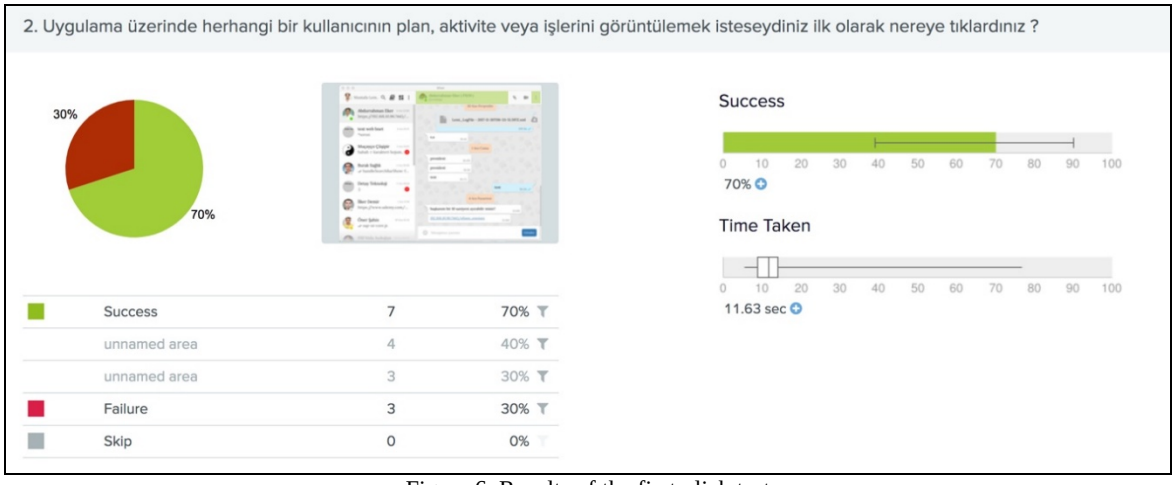

Figure 6: Results of the first-click test

In Figure 6, the first click test performed by the users shows that the users first click maps on the screen on different prototypes have designed for application.

CONCLUSION

Due to the increasing number of products depending on the developing technologies, studies on usability and user experience gain importance. User experience helps determine whether a product is functional and usable. Since usability testing is costly and time-consuming to implement, manufacturers often don't spend time on these tests or they only focus on product designs by resorting to intuitive methods. In this study, a number of test methods have been applied to evaluate the usability of interface designs to improve the quality and user satisfaction level of software products have been developed. The analysis of the data obtained from the tests performed by the users revealed how the design problems affect the use of the software products and the development of different approaches and variations in the design studies was provided. The goal of implementing these tests is to develop software products that are user-focused and appealing to the target audience and that are easy to use with minimal effort and time.

Several of the commonly used testing methods have been implemented to expose usability problems of software products in the study and to produce new solutions to these problems. Better results than intuitive methods can be obtained because analysis of data can be performed analytically in real users tests. A/B or multivariate testing methods can be applied seperately from the first-click or tree test to ensure that the design and functionality of the software products being developed and it's development achieves better results.

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