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# Beden Eğitimi Öğretmen Adaylarının Yaşam Bağlılığı ile İnternet Bağımlılığı Arasındaki İliskinin Cesitli Değiskenlere Göre İncelenmesi

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## Öz

Bu çalışmada, beden eğitimi öğretmen adaylarının yaşam bağlılığı ile internet bağımlığı arasındaki ilişkinin çeşitli değişkenlere göre incelenmesi amaçlanmıştır. Çalışma, genel tarama modelinde yapılmış betimsel bir araştırmadır. Araştırmanın çalışma grubu iki üniversitede öğrenim gören 142'i kadın, 211'i erkek olmak üzere toplam 353 beden eğitimi öğretmen adaylarından oluşmaktadır. Veriler, Yaşam Bağlılığı Ölçeği ve İnternet Bağımlılığı Ölçeği ile toplanmıştır. Yaşam bağlılığı sınıf düzeyi ve cinsiyet arasındaki ilişkiler bağımsız gruplar için t-testi, yaşam bağlılığı ile internet bağımlılığı arasındaki ilişki korelasyon analizi ile test edilmiştir. Çalışmada yaşam bağlılığı ile cinsiyet arasında anlamlı bir fark bulunmazken, sınıf düzeyine göre anlamlı fark bulunmuştur. Ayrıca yaşam bağlılığı ile internet bağımlılığı arasında negatif doğrusal bir ilişki saptanmıştır. Bulgular literatür ışığında tartışılmıştır.

Anahtar Kelimeler: Beden eğitimi öğretmeni, yaşam bağlılığı, internet bağımlılığı, cinsiyet



# Examination of the Relationship between Life Engagement and Internet Addiction of Physical Education and Sport Teacher Candidates in terms of Different Variables

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#### **Abstract**

The aim of this study is to examine the relationship between life engagement and internet addiction of physical education and sport teacher candidates. This descriptive research was carried out general screening model. The participants included 353 physical education and sport teacher candidates (142 female, 211 male) in two different universities. In the data collection process, Internet Addiction Scale and Life Engagement Scale were utilized. The relationships between life engagement, class level and gender were analyzed through independent groups t-test and the relationship between life engagement and internet addiction was analyzed through correlation technique. The results revealed that there was no significant relationship between life engagement and gender. However, a significance relationship was observed between life engagement and class level. In addition, a negative linear relationship between life engagement and internet addiction was found. The results of the study were discussed in light of the related literature.

Keywords: Physical education and sport teacher, internet addiction, life engagement, gender



### Introduction

Universities are educational and research institutions furnishing high level of education, training, scientific research and publications and comprising faculties, institutes, colleges, vocational schools, research and training centers, and etc. and providing expertise in specific areas to students. University life covers a wide area including academic and human relations. Students constitute the basic input of this living area. University years can be described as a period in which the students try the roles of adults, prepare themselves for business life and idealize values related to their lives more.

Students in Turkey are entitled to study at university subsequent to a challenging competition. According to SSPC (2015) data the 2.12667 million students have applied to SSPE. However, only 417,714 of these students (19%) have been qualified to study in a formal program at the undergraduate level. University students in Turkey prefer the department/program they study due to several reasons. Due to the difficulty of being admitted to university, a significant part of the students have to choose departments in which they have less interest or no interest instead of departments they are really interested in order to be able to be study, learn a profession and secure their lives (Şahin, Zoraloğlu, Şahin Fırat, 2011). It can be anticipated that satisfaction level of the students from the universities will increase if the expectations of the students are met no matter the department they preferred is and if they can reach their objectives and goals. And it can be said that this may prevent negative behaviors and lead to positive change in a person. The goals which are deemed valuable help stabilization of the purposes which play an important role in the development of life engagement (Uğur and Akın, 2015). Individuals who are engaged with attainable goals identified thereby meet their psychological needs such as finding the meaning of life within the process of achieving their aims and life satisfaction of individuals increase. (İlhan & Özbay, 2010; Scheier et al, 2006).

It is reported that students with high levels of life satisfaction have higher academic performance and better interpersonal relationships than their peers with a low levels of life satisfaction Gilman and Huebner, 2006; Goodenow and Grady, 1992). As revealed by a study conducted on subjects from seventeen different countries (Diener, 2000), a vast majority of university students give more importance to life satisfaction than money. Therefore, it can be said that increase in life satisfaction among university students has a notable role in realization of positive psychological health (Çivitçi, 2012). The research findings indicate to the fact that those who identify an aim and make attempt to achieve their aims have a better level in terms of life satisfaction, happiness and subjective well-being (Eryılmaz, 2011, 2011b, 2014). In this context, it can be said that if the individuals exert effort to achieve their life satisfaction their life engagement will also be stronger at the same time.

Life engagement consists of a process which is directly or indirectly associated with the individual's purposes of life. Life engagement when considered on the basis of purposes of life has a quite broad scope and it has a meaning making positive contributions to physical and psychological health of the individuals (Uğur and Akın, 2015). The purposes of life created by the individual constitute an important part of the personality development process thereof (Adler, 2014). The purposes which add a meaning to the lives of individuals and which help their personal development at the same time play a protective role against psychological problems (Wrosch et al., 2003).



Individuals with high level of life engagement have strong reasons to live and survive. According to Eryılmaz (2012) setting life goals cause positive impacts on mental and physical health of individuals. The importance of concepts such as goal setting, purposefulness, and purposes of life increase further when considered together with life engagement. Indeed, in some researches a positive relation was found between life engagement and optimism, self-esteem, emotional stability, social functioning, physical well-being, extroversion and life satisfaction while a negative relation was found between life engagement and depression, perceived stress, anger and hostility (Uğur and Akın, 2015; Çevik and Korkmaz, 2014; Scheier et al., 2006). When findings of research on life engagement are examined, it can be said that personality traits of individuals with less life engagement and individuals with internet addiction resemble each other.

Internet addiction, which is a concept meaning use of internet in a limitless way by an individual and therefore individual's facing various problems in personal, social, and professional life (Şahin and Korkmaz, 2011), has a negative relation with life engagement. In most of the studies made about internet addiction, it is seen that internet addiction's physical, psychological and social negative effects on individual have been researched. Internet addiction has been described by different concepts such as violent tendencies (Babacan Gümüş et al., 2015), depression (Şahin, 2014), insomnia and depression (Cheung and Wong, 2011), anger (Ata, Akpınar and Kelleci, 2011), psychiatric symptoms (Kelleci and İnal, 2010), social support and peer pressure (Esen, 2007) psychological symptoms (Yen et al., 2008) and loneliness (Morahan-Martin and Schumacher, 2003; Ayaroğlu, 2002).

When the literature is examined, a study investigating the relationship between internet addiction and life engagement was not found. As such, this study is expected to provide contribution on this field. The main purpose of this study is to know life engagement levels of Turkish university students and in particular students of physical education teaching departments and determination of the relation between life engagement levels and their internet addiction levels according to different variables. Answers for the following questions were sought in line with this general purpose:

- 1. What are the life engagement and internet addiction levels of students?
- 2. Is there a significant relation the life engagement and internet addiction levels of students?
- 3. Do the life engagement levels of students vary significantly by gender and grade?

### **Materials and Method**

## Model

This study is a descriptive study performed as per survey model.

## **Research Group**

The participants included 353 physical education and sport teacher candidates (198 Ahi Evran University, 155'i Niğde University) in two different universities.



### **Data Collection Tools**

Data of this study have been collected by Demographical Information Form, Life Engagement Test and Internet Addiction Scale. Psychometric features of measuring tools used in the study have been specified herein below.

Demographical Information Form: Information on Participants in relation with their demographical characteristics such as age, gender, department they study has been obtained by personal information form.

Life Engagement Test: The scale designed by Scheier at. al. (2006) and adapted into Turkish by Uğur and Akın (2015) was used. Results of confirmatory factor analysis demonstrated that the six items loaded on one factor:  $x^2 = 11.50$ , df= 8, RMSEA= .039, GFI= .99, AGFI= .97, IFI= .99, NFI= .97, NNFI= .98, CFI= .99, RFI= .94 ve SRMR= .032. Factor loadings ranged from .22 to .82 and the corrected item-total correlations ranged from .22 to .60. Cronbach Alpha internal consistency reliability coefficient was .74. According to these results it can be argued for that the Life Engagement Test is a valid and reliable instrument.

Internet Addiction Scale: The scale designed by Hahn and Jerusalem (2001) to determine internet addiction levels of the individuals and adapted into Turkish by Şahin and Korkmaz (2011) was used. The original title of the scale is "Skala zur Erfassung der Internetsucht". The scale contains 19 items and 3 factors. The first factor is "Loss of Control"; the second factor is "Tolerance Development" and the third factor is "Negative Consequences for Social Relationships". In order to test structural validity of the scale, Kaiser-Meyer-Oklin (KMO) and Bartlett test analyses were firstly performed. It was indicated that KMO= 0,919; Bartlett test value was x2 = 6087,383; sd=171 (p=0,000). It was found that the items within the scale concentrated on three factors and explained 68.095% of total variance. Confirmatory factor analyses showed that the model had an acceptable adaptation. To calculate discriminative power of items, the correlations between the scores obtained from each item and the scores obtained from the factors were calculated and it was found that each item had a significant and positive relationship with factor score. Internal consistency analyses were conducted to calculate internal consistency of the scale. Analyses showed that internal consistency coefficients of the factors varied between 0.887 and 0.926 and that internal consistency coefficient for the general of the scale was 0.858. In that study, it was also indicated that Cronbach's Alpha Coefficient was .890.

### **Data Analysis**

In order to get answers of the questions mentioned in the study aims section, arithmetic mean, standard deviation, independent sampling t test, ANOVA and Scheffe tests and r analysis were performed. For significant test, level of p<.05 is accepted.

#### Results

This study was conducted by participation of 353 students in total including 142 female (%40,2) and 211 male (%59,8) students receiving education in the department of physical education and sport of two different universities. 95 students (26.9%), 64 students (18.1), 114 students (32.3) and 80 (22.7) and in the study groups belonged to first grade, second grade, third grade and fourth grade respectively. All of the students stated that they used the



internet and their daily internet usage time was determined as  $2.39 \pm 0.71$  hours. 17 students (4.8%), 212 students (60.1%), 92 students (26.1%) and 32 students (9.1%) considered their internet use skills as novice, medium advanced and expert respectively.

## **Descriptive statistics**

N number, mean and standard deviation values as to Life Engagement (LE) and Internet Addiction (IA) scores of students are given in Table 1.

**Table 1.** N, mean and standard deviation values as to (LE) and (IA) scores

Variable	N	Mean	Std. Dev.
Life Engagement (Total)	353	24,62	4,35
Internet addiction (Total)	353	43,06	15,60
Loss of control	353	16,45	5,81
Tolerance development	353	7,73	3,12
Negative consequences for social relationships	353	18,87	8,39

The level of life engagement of students was found to be high  $(24.62 \pm 4.35)$  while the level of internet addiction of students was found to be moderate  $(43.06 \pm 15.60)$  as can be seen in Table 1.

## The relation between students' life engagement and internet addiction

Pearson correlation coefficient was calculated to examine the relation between the scores the students obtained from life engagement test and the internet addiction scale. The results obtained are shown in Table 2.

**Table 2** R coefficient Related to LE and IA scores

Variable	Life Engagement (Total)
Internet addiction (Total)	-,376*
Loss of control	-,266*
Tolerance development	-,293*
Negative consequences for social relationships	-,405*

N=353, \*p<0,01

As given in Table 2 a negative and significant relation was found between life engagement scores and internet addiction (total) scores (r = -, 376; p < .01) and loss of control (r = -,266; p < .01), tolerance development (r = -,293; p < .01) and negative consequences for social relationships (r = -,405; p < .01) which are lower dimensions of Internet addiction.

## Examination of life engagement as per gender

The fact whether life engagement varies or not as per gender at significant levels has been analyzed by t-test technique for independent groups.



**Table 2.** Life engagement t-test results as per gender

Gender	N	Mean	Std. Dev.	Sd	t	Sig.
Female	142	25,10	4,23	351	1,70	,090
Male	211	24,30	4,41			

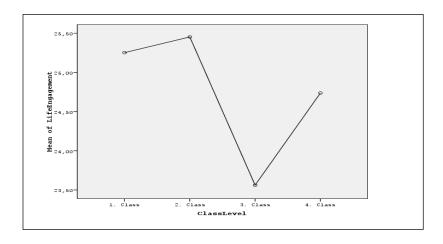
It is seen in Table 2 that life engagement point of female students  $(25,10\pm4,23)$  is higher than life engagement point of male students  $(24,30\pm4,41)$ . As result of the statistical analysis performed, it is found that difference between life engagement points of female students and male students is not significant (t(351)=1,70; p<.05).

## Examination of life engagement as per class level

The fact whether life engagement of students varies or not as per class level has been analyzed by one-way variance analysis technique. Table 3 includes average related to life engagement points of students of different classes and standard deviation values and one-way variance analysis results.

**Table 3.** Descriptive statistics as per class level and One-Way ANOVA results

Variable	Class	N	Mea n	Std. Dev.		Sum of squares	Sd	Mean Squar e	F	p	Schef fe
_	1.	95	25,2	3,88	Between	211,28	3	70,42	3,8	,01	1>3
	Class		5		groups				0	*	2>3
Life	2.	64	25,4	3,88	Within	6469,35	349	18,53			
Engage	Class		5		groups						
ment	3.	114	23,5	4,84	Total	6680,64	352				
	Class		6								
	4.	80	24,7	4,27							
	Class		3								
	Total	353	24,6	3,35							
			2								



\*p<0.01

Figure 1. Comparison of the average life engagement scores in terms of grade level



When Table 3 and Figure 1 are examined it is seen that life level scores of students vary slightly according to the grade levels. Significance of the difference between these averages has been examined by one-way variance analysis technique. It is found that life engagement average points vary as per class level [F (3-349) = 3,80; p<.01]. Furthermore, according to Scheffe test results carried out in order to determine between which groups the difference appears, it is detected that the difference is between  $1^{st}$  and  $2^{nd}$  classes as well as  $3^{rd}$  class.

### **Discussion and Conclusion**

This study is carried out to determine the life engagement and internet addiction levels of physical education teacher candidates examine the relation between life engagements and determine factors affecting the level of engagement to life.

It is expected that evaluation of life engagement based on the strong relation between life engagement and concepts such as life satisfaction and subjective well-being laid in the light of the findings will provide contribution to the literature (Uğur and Akin, 2015).

Research findings reveal the fact that students have a high level of life engagement. It is an expected situation that students who study in the department they desire, give importance to success, meets their qualification requirement and who perceive themselves more successful academically and have high life satisfaction have high level of engagement. Giving life a meaning and determining purposes of life mediates individuals to experience positive feelings and serves as a function to protect them from psychological problems (Uğur and Akın, 2015). The research findings indicate the fact that those who determine a purpose and attempt to achieve their purposes are in a better level in terms of subjective well-being compared to those who do not attempt (Eryılmaz, 2011a, 2011b, 2014).

It is understood in the study that the students have middle average score of internet addiction. Studies carried out with those in the 16-24 age group in the world and Turkey reveal different conclusions on the use of the internet. According to the survey of Turkey Statistical Institute - TSI (2015) internet and computer usage was observed to be most common in the 16-24 age

group. Significant relation was not found between age and internet addiction in some studies, while in other studies internet addiction was found to be higher among young adults (Şahin, 2016; Bölükbaş, 2003; Greenfield, 1999).

Another finding obtained in this study is that there is a significant negative linear relationship between life engagement and internet addiction. In other words, it can be said that life engagement decrease when internet addiction increases. Life engagement when considered on the basis of purposes of life has a quite broad scope and it has a meaning making positive contributions to physical and psychological health of the individuals (Uğur and Akın, 2015). On the other hand, internet addiction, which is a concept meaning use of internet in a limitless way by an individual and therefore individual's facing various problems in personal, social, and professional life (Şahin and Korkmaz, 2011), has a negative relation with life engagement. As such, it can be said that life engagement and internet addiction affect each other adversely. It was found that there was no difference between students in terms of gender as to life engagement. However, average scores of female students were found significantly higher than the scores of male students. These findings can be construed as women attach more attention to education. The finding that girls give more important to education than boys in a research carried out by Yıldırım (1997) supports this finding. Also in a study as to life



goals of university students, it was determined that women's primary goal is being well-educated and cultured while men's primary goal is having a job and career (Abowitz and Knox, 2003). Women's giving more important to education than men can be interpreted as women's belief that they can raise their social status by receiving more education.

Results showed that life engagement of students is more positive in 1<sup>st</sup> and 2<sup>nd</sup> grades compared to upper grades. This case can be explained basing on the fact that the last grade students have changed the objectives they have desired to more realistic objectives. The reason of this finding may be the fact that the student who comes to the last grade determines more concrete targets and desires to go into business life as soon as possible. A significant feature of this study is its being carried out on physical education students. Conducting this study on such a study group and the obtained results from such study are important both for physical education students as well as individuals who will give training in the future.

An important limitation of this research is that the research group is composed of physical education students studying only in two state universities. Therefore, there is requirement for conduction of more widely studies with a view to make generalization. Some proposal can be offered based on the obtained results. Various studies can be conducted to raise the life engagement level of university students within the scope of student personnel services. Studies can be carried out for identifying students with low life satisfaction and internet addiction at the university as well as conducting studies to determine students who are at risk. Furthermore, studies in the form of group counseling, individual interviews and seminars can be arranged for developing life satisfaction of university students and on the issue of internet addiction.

#### REFERENCES

Abowitz DA, Knox D (2003). Life goals among Greek college students.

College Student Journal, 37(1), 96-100.Adler, A. (2014). Yaşamın anlamı. (Çev.). Ankara: Tutku Yayınevi.

Ata E.E, Akpınar Ş, Kelleci M (2011). Üniversite öğrencilerinin problemli internet kullanımı ile öfke ifade tarzları arasındaki ilişki. *TAF Preventive Medicine Bulletin*, 10(4), 473-480.

Ayaroğlu N.S (2002). The relationship between internet use and loneliness of university students. *Yayımlanmamış Yüksek Lisans Tezi*, Ankara: Orta Doğu Teknik Üniversitesi Eğitim Bilimleri Bölümü.

Babacan Gümüş A, Şıpkın S, Tuna, A, Keskin G (2015). Üniversite öğrencilerini problemli internet kullanımı, şiddet eğilimi ve bazı demografik değişkenler arasındaki ilişki. *TAF Preventive Medicine Bulletin*, 14(6), 460-467.

Bölükbaş K (2003). İnternet cafeler ve internet bağımlılığı üzerine sosyolojik bir araştırma: Diyarbakır örneği. *Yayınlanmamış Yüksek Lisans Tezi*, Dicle Üniversitesi, Sosyal Bilimler Enstitüsü, Diyarbakır.

Cheung LM, Wong WS (2011). The effects of insomnia and internet addiction on depression in Hong Kong Chinese adolescents: an exploratory cross-sectional analysis. *Journal of sleep research*, 20(2), 311-317.



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Çevik NK, Korkmaz O (2014). Türkiye'de yaşam doyumu ve iş doyumu arasındaki ilişkinin iki değişkenli sıralı probit model analizi. *Niğde Üniversitesi İİBF Dergisi*, 7(1), 126-145.

Çivitçi A (2012). Üniversite öğrencilerinde genel yaşam doyumu ve psikolojik ihtiyaçlar arasındaki ilişkiler. Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi, 21(2), 321-336.

Diener E (2000). Subjective well-being: The science of happiness and a proposal for a national index. American Psychologist, 55 (1), 34-43.

Eryılmaz A (2011a). İhtiyaç doyumu ve yaşam amaçları belirleme: Lise öğrenimi gören ergenler için bir öznel iyi oluş modeli. *Kuram ve Uygulamada Eğitim Bilimleri, 11*(4), 1747-1764.

Eryılmaz A (2011b). Ergen öznel iyi oluşunun, öznel iyi oluşu arttırma stratejilerini kullanma ile yaşam amaçlarını belirleme açısından incelenmesi. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*, 24,44-51.

Eryılmaz A (2012). Pozitif psikoterapi bağlamında yaşam amaçları belirleme ölçeğinin üniversite öğrencileri üzerinde psikometrik özelliklerinin incelenmesi. *Klinik Psikiyatri*, 15, 166-174.

Eryılmaz A (2014). Yaşama anlam yükleme-yaşam amaçları belirleme: madde bağımlısı olan ve olmayan gençlerin karşılaştırılması. *Turkish Psychological Counseling and Guidance Journal*, 5(42), 235-243.

Esen KN (2007). Akran baskısı ve algılanan sosyal destek değişkenlerine göre, ergenlerde internet bağımlılığının yordanması. Ülkemizde Bağımlılıkla İlgili Gelişmeler içinde (ss.1-9). *I. Uluslararası Bağımlılık Kongresi*, İstanbul.

Gilman Ri Huebner ES (2003). A review of life satisfaction research with children and adolescents. *School Psychology Quarterly*, 18, 192-205.

Gilman R, Huebner ES (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence*, 35, 311-319.

Goodenow C, Grady KE (1993). The relationship of school belonging and friend's values to academic motivation among urban adolescent students. *Journal of Experimental Education*, 62(1), 60-71.

Greenfield DN (1999). Psychological characteristics of compulsive Internet use: a preliminary analysis. *Cyberpsychol Behav*ior, 2, 403-412.

İlhan T, Özbay Y (2010). Yaşam amaçlarının ve psikolojik ihtiyaç doyumunun öznel iyi oluş üzerindeki yordayıcı rolü. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 4*(34), 109-118.

Kelleci M, Inal S (2010). Psychiatric symptoms in adolescents with Internet use: comparison without Internet use. *Cyberpsychology, Behavior, and Social Networking, 13*(2), 191-194.

Morahan-Martin J, Schumacher P (2003). Loneliness and social uses of the Internet. *Computers in Human Behavior*, 19(6), 659-671.

OSYM (2015). http://dokuman.osym.gov.tr/pdfdokuman/2015/OSYS/2015-OSYSYerlestirme SonucSayisalBilgiler23072015.pdf



Scheier MF, Wrosch C, Baum A, Cohen S, Martire LM, Matthews KA. Schulz R, Zdaniuk B (2006). The life engagement test: Assessing purpose in life. *Journal of Behavioral Medicine*, 29(3), 291-298.

Şahin C, Korkmaz Ö (2011). İnternet bağımlılığı ölçeğinin Türkçeye uyarlanması. Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi, 32, 101-115.

Şahin C (2014). An analysis of the relationship between internet addiction and depression levels of high school students. *Participatory Educational Research (PER)*, 1(2), 53-67.

Şahin C, Aydın D, Balay R (2016). Eğitim fakültesi öğrencilerinin internet kullanımı ile internet bağımlılıklarının incelenmesi, Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 17(1), 483-499.

Şahin İ, Zoraloğlu YR, Şahin Fırat N (2011). Üniversite öğrencilerinin yaşam amaçları, eğitsel hedefleri, üniversite öğreniminden beklentileri ve memnuniyet durumları. *Kuram ve Uygulamada Eğitim Yönetimi*, 17(3), 429-452.

Uğur E, Akın A (2015). Yaşam Bağlılığı Ölçeği Türkçe Formu: Geçerlik ve Güvenirlik Çalışması. İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 4(2), 424-432.

Wrosch C, Scheier MF, Carver CS, Schulz R (2003). The importance of goal disengagement in adaptive self-regulation: When giving up is beneficial. *Self Identity*, 2, 1-20.

Yen J Y, Ko CH, Yen CF, Chen SH, Chung WL, Chen CC (2008). Psychiatric symptoms in adolescents with Internet addiction: Comparison with substance use. *Psychiatry and clinical neurosciences*, 62(1), 9-16.

Yıldırım A (1997), Gender role influences on Turkish adolescents' self-identity, *Adolescence*, 32(125), 217–231.