ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

THE RELATIONSHIP BETWEEN UNEMPLOYMENT, EMPLOYMENT EXPECTATIONS AND HAPPINESS IN TURKEY FOR THE YEARS: 2003-2018

TÜRKİYE'DE İŞSİZLİK, GELECEK YIL ÇALIŞMA HAYATI BEKLENTİLERİ VE MUTLULUK İLİŞKİSİ: 2003-2018

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Abstract

This study analyses the relationship between employment/unemployment, expectations, and happiness in Turkey by using the Life Satisfaction Survey conducted regularly by the Turkish Statistical Institute (TUIK) since 2003. In the study, happiness of unemployed individuals comprising of different people between 2003-2018 have been analysed through a comparison of those in employment versus those outside of the workforce. In addition to the relationship between unemployment and happiness; the entire sample between the ages of 18-64 and the unemployed were compared in terms of their employment expectations for the following year for the country as well as their personal employment expectations and happiness. The results of the study indicate that being unemployed is correlated with negative life satisfaction, and there is a negative correlation with happiness and unemployment. As a result of the study, it is determined that there is a difference between those who live in the region with a high unemployment rate and those who live in the region with a low unemployment rate. Accordingly, the life satisfaction of an unemployed person living in an area with a high unemployment rate is less negatively affected than an unemployed person living in an area with a low unemployment rate.

Keywords: Employment Expectations, Happiness, Subjective Well-Being, Turkey, Unemployment

JEL Classification: I30, I31, J101

Öz

Bu çalışma, Türkiye İstatistik Kurumu (TÜİK) tarafından 2003 yılından bu yana düzenli olarak yapılan Yaşam Memnuniyeti Anketi kullanılarak Türkiye'de istihdam/işsizlik, beklenti ve mutluluk arasındaki ilişkiyi analiz etmektedir. Çalışmada, 2003-2018 yılları arasında farklı kişilerden oluşan işsiz bireylerin mutlulukları, istihdamda olanlar ve işgücü dışında olan bireyler ile karşılaştırılarak analiz edilmiştir. İşsizlik – mutluluk ilişkisinin yanı sıra; 18-64 yaş örneklemin tamamı ile sadece işsizlerin gelecek

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1

yıl ülke ve kişisel çalışma beklentileri analiz edilmiştir.Çalışmanın sonuçları işsiz olmanın olumsuz yaşam memnuniyeti ile ilişkili olduğunu, mutluluk ve işsizlik ile negatif bir korelasyon olduğunu göstermektedir. İşsizlik oranının yüksek olduğu bölgelerde yaşayan işsizlerin görece daha az olumsuz etkilendiği, iş bulma konusunda hem birey bazında hem de ülke bazından gelecek yıla dair olumlu beklentiye sahip olmak mutlulukla pozitif korelasyona sahipken, olumsuz beklentilerin ise negatif korelasyona sahip olduğu gösterilmektedir.

Anahtar Kelimeler: Istihdam Beklentileri, Mutluluk, Öznel Iyi Oluş, Türkiye, Işsizlik

JEL Sınıflandırması: I30, I31, J101

Introduction

Unemployment is one of the most significant issues that both developing and developed countries face in the first decades of the twenty first century. With the increasing globalization and automation, there have been several changes in the capital structure. Additionally, the increase in workforce because of the increases in populations over time has also led to certain problems in creating employment. Apart from these developments, crises are also a factor that causes increases in unemployment. [1]

Failure of a country to include its workforce in employment will have negative impact both in micro and macro dimensions. By affecting people's income situations, unemployment lowers their standards of living. Being employed provides the individual with income, socialisation, and a positive well-being. Being unemployed, on the other hand, brings about financial and emotional losses both for the individual and for the state.

One of the consequences of unemployment is its negative impact on people's happiness. While being employed generally has a positive influence on the individual's happiness, being unemployed has a negative impact on it. Living in regions with high unemployment, the gender of the unemployed person, personal working life and the expectations relating to employment in the country, also have different effects on happiness (Clark and Oswald, 1994; Clark 2003).

Turkey, as a developing economy, has been struggling with relatively high unemployment rates for many years compared to other developing and developed countries. The unemployment rate which was 10.50% in 2003 according to TUIK data, increased to 11.00% in 2008 with the global crisis and to 14.00% in 2009. Also, unemployment was 11.00% in 2018.

This study aims to examine the relationship between happiness and city-based unemployment rates, personal expectations about employment and employment expectations in Turkey between 2003 and 2018. We used the dataset for the years 2003-2018 of the Life Satisfaction Survey of the Turkish Statistical Institute.

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1   For example, according to data from the World Bank, the rate of unemployment in the world a result of the global crisis in 2008 was 5.35%, in 2009, while the rate of unemployment was 7.20% in the European Union in the year when the crisis hit, it rose to 9.11% in 2009. And in the United States, the rate of unemployment, which was 5.8% in 2008, rose to 9.28% in 2009, and while it was 3.70% in 2019, this rate is expected to rise to 8.90% in 2020 due to the Covid-19 pandemic (IMF, 2020).

The study reveals that there is a negative relationship between unemployment and happiness (while being employed is correlated with positive life satisfaction). Besides, we find that the life satisfaction of unemployed people living in an area with a high unemployment rate is less affected by this situation. Similarly, having positive expectations about employment both on a personal basis and on the basis of the country in general positively influence the life satisfaction of the unemployed while having negative expectations in this regard has a negative influence on life satisfaction.

Following the introduction section, the first part of the study consists of the literature review on unemployment and happiness relationship and the third part consists of the descriptive analysis of the variables used in the study. The fourth part of the study will give information regarding the description of the variables, methodology, findings, and econometric results, and the fifth part will consist of the conclusion.

2. Literature Review

Unemployment rate is a significant macro-economic indicator of the individual and the society in which they live. Besides, the unemployment rate is a determinant, which is used in happiness research. Unemployment is defined as people who seek jobs, and who never worked during the reference week (Stewar, 1950). Being unemployed has both financial and psychological effects on the individual.

Some of the researchers used various panel datasets (*British Household Panel Study-GHQ Survey, German Socio-Economic Panel (GSOEP), Household Income and Labour Dynamics Survey of Australia (HILDA), Longitudinal Internet Studies for the Social sciences (LISS) etc.*) to analyse the relationship between unemployment and happiness (Clark and Oswald 1994; Winkelmann and Winkelmann 1995; Clark 2003; Carrol 2005; Winkelmann 2009; Kassenboehmer and DeNew 2009; Van der Meer and Wielers 2016). Studies in general indicate that there is a negative correlation between unemployment and life satisfaction. Some studies stated that negative effects of unemployment are less pronounced in areas with high unemployment rates (Clark and Oswald 1994; Clark 2003). On the other hands, there are also studies showing that financial costs of unemployment are higher than psychological ones, that unemployment cause more harm for men than for women, that self-esteem is affected by unemployment and that subjective well-being is affected by self-esteem and unemployment (Winkelmann and Winkellman 1995; Clark 2003; Van der Meer and Wielers 2016).

Some of the studies that we came across in the literature were based on cross-sectional data (Gallie and Russell 1998; Ahn *et al.* 2004; Vatter 2012; Ohtake 2012; Wulfgramm 2014, Stam *et al.* 2015; Chen and Hou 2018). The findings of studies conducted using cross-sectional data can be explained as: in communities in which women constitute the majority of the unemployed people, the severity of unemployment can be perceived to be low by the community, in communities in which the young constitute the majority, the young are negatively impacted to a lesser degree;

the impact of unemployment on happiness can vary between countries; it is more effective to create jobs than to distribute the welfare among the unemployed in order to increase happiness, and being jobless, experiencing unemployment and having a fear of unemployment are among the factors that decrease happiness. (Gallie and Russel 1998; Ahn *et al.* 2004; Ohtake 2012). Furthermore, the studies indicate that the life satisfaction of the unemployed is determined to a large extent by the labour market policies, and that social norms have little impact on unemployed individuals (Wulfgramm 2014).

There are few studies conducted on unemployment and happiness in Turkey. (See Aysan & Aysan 2017, Susanlı 2018, Kuzu et al., 2019). According to Aysan & Aysan (2017), on the other hand, using the European Quality of Life Survey (EQLS) in this study, find that unemployment reduces people's life satisfaction even if the financial situation and other individual characteristics are kept constant. Kuzu et al. (2019). Using the data of the Life Satisfaction Survey (LSS), they have been examined whether the demographic factors affecting the employment status of people in Turkey for 2015 were related to the happiness of individuals. In the study, it has been found that employment is related to happiness and gender, but also a significant difference was observed between happiness and gender. It has been stated that the relationship gender and unemployment is stronger in men compared to women. Susanlı (2018), who examined the relationship between unemployment and happiness using the LSS data of 2015, found a significant difference between happiness and gender. To include the expectations of the unemployed for working life next year and to make a detailed analysis according to the provinces for 2013 is the aim of this research.

Lastly, some t-time studies are also part of the the literature (Angeles 2010; Feather and O'Brien 1986; Andersen 2009). The findings of the studies in this category suggest that unemployed people feel less competent, more depressive and they tend to have lower life satisfaction, and that the negative impact experienced by people in the middle-income scale is higher (Feather and O'Brien 1986; Andersen 2009).

There are numerous studies in literature regarding expectations and life satisfaction (Gao and Smyth 2011; Michalos 1980; Møller 1996 *etc.*). We have also come across studies, which included a question regarding expectations about employment for the following year (De Juan ve Mochón 2014; Caner 2015). While having better expectations for the following year or for 5 years later is generally linked to positive life satisfaction; having worse expectations has a negative link with life satisfaction. This also goes for expectations regarding working life. We believe that this study differentiates itself from other studies that included expectations regarding following year/years – life satisfaction as it includes questions about expectations toward employment for the country for the following year and expectations regarding the personal employment for the following year.

3. Descriptive Statistics

TUIK's the Life Satisfaction Survey for years 2003-2018 was used in the study. TUIK uses a 5-point likert scale in these surveys. Since 10-point scales [2] are more common in happiness surveys around the world, the scale was adapted to a 0-10 scale during the descriptive analysis. Table 1 given below shows comparative average happiness levels and standard deviations of the unemployed people, employed people and also those outsides of the workforce as these people made up the majority of the sample for the survey, for the respective years.

Table 1: Happiness Average and Standard Deviation of the Unemployed, Employed and Those Outside of the Workforce for the Respective Years

Years	Unemployed		Employed		Outside of the Workforce	
	Average Happiness	Standard Deviation	Average Happiness	Standard Deviation	Average Happiness	Standard Deviation
2003	5.59	2.32	6.59	2.03	6.55	2.32
2008	5.07	2.38	6.19	2.19	6.26	2.38
2009	4.80	2.55	6.17	2.23	6.22	2.55
2010	5.62	2.40	6.47	2.08	6.42	2.40
2013	5.42	2.51	6.44	2.12	6.45	2.51
2018	5.35	2.50	6.10	2.11	6.35	2.50

As expected, average happiness of the unemployed is lower than the employed and those outside of the workforce. It is not unusual for those outside of the workforce to be happier than employed people as this group consists mostly of housewives and retirees. Table 2 and Table 3 represent the percentile distribution of the age group 18-64 for the question about their employment expectations for the country and their personal employment expectations for the following year. Accordingly, while we observe a decline in people who responded, "it will be better" for the question about employment expectations in the country, there seems to be an increase in those who responded, "it will be worse". On the other hand, we see an increase in people who said "it will be better" for the question about their personal employment compared to 2009 while the number of people who said "it will be worse" also increased.

Table 2: Employment Expectations for the Country in the Following Year for the Respective Years (%)

It will be better		It will remain unchanged		It will be worse		No idea	
Years	Percentage	Years	Percentage	Years	Percentage	Years	Percentage
2003	28.7	2003	30.04	2003	25.5	2003	15.76
2008	8.79	2008	25.04	2008	53.33	2008	12.84
2009	12.14	2009	33.29	2009	37.12	2009	17.45
2010	23.47	2010	31.38	2010	24.38	2010	20.78
2013	29.38	2013	23.31	2013	23.52	2013	23.79
2018	17.59	2018	26.75	2018	45.11	2018	10.55

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2   For detailed information about converting a 5-point likert scale into 10-point likert scale: https://worlddatabaseofhappiness.eur.nl/.

Table 3: Personal Employment Expectations for the Following Year for the Respective Years (%)

It will be better		It will remain unchanged		It will be worse		No idea		Will not work	
Years	Percentage	Years	Percentage	Years	Percentage	Years	Percentage	Years	Percentage
2009	11.83	2009	42.83	2009	9.01	2009	7.81	2009	29.11
2010	17.42	2010	38.07	2010	5.96	2010	7.67	2010	30.88
2013	19.28	2013	35.26	2013	6.04	2013	12.03	2013	27.4
2018	17.82	2018	43.32	2018	11.37	2018	4.64	2018	22.85

4. Methodology, Model, and the Econometric Findings

4.1. Typical Happiness Equation and Defining the Variables

In the literature the life satisfaction is modelled mostly and in its most basic form as follows:

$$Si=\alpha+\beta Xi+ei$$

Si, expresses life satisfaction of the participant and the Greek letters represent the parameters. X represents control variables such as age, gender, education status etc. ei indicates the error term and α indicates the constant term; while the coefficients represent the variables that help determine the subjective well-being of each person. (Veenhoven & Dumludag, 2018).

The dataset used in the study of TUIK's the Life Satisfaction Survey for 2003-2018 is cross-sectional which means observation changes year to year. However, the same questions are not included in the question set every year. Due to the limitations and challenges of the dataset, it is not possible to use a single model for all the years in the dataset, and instead we had to use a pooled analysis as 2003-2008, 2009-2012,2013 and 2014-2018.

As the unemployed people, who constitute the main topic of the study, were asked the question about their "employment status" under a single question in the Life Satisfaction Survey until 2008, the data for 2003-2008 was estimated using a different regression. Employment status and reasons for being unemployed were asked as separate questions between 2009-2012, and for this period the group was analysed within itself. In 2013, the "city" variable was added to the dataset for the first time special to that year, which made it possible for a city-based analysis; hence, this year was estimated by itself. The period between 2014-2018 was analysed separately since the question regarding the employment status for this period was also asked under two separate questions and since place of residence was based on whether it was a municipality or not, rather than making a distinction based on rural-urban areas like it was for 2003-2008 or 2009-2012. Consequently, four separate pools were created as "2003-2008, 2009-2012, 2013 and 2014-2018". The dataset was analysed through "*OrdinaryLeast-Squares Method*" in the cross-sectional study and a dummy variable was employed in the model. The controls are provided in appendix table A2 such as gender, age, income group, educational background, employment expectations

(country and personal), marital status. The *STATA 14.2* package software was used to estimate the model.

4.2. Variables

Concepts such as employment, workforce and unemployment are some of the building blocks of economy. Turkish Statistical Institute divides the labour force of non-institutional population into two categories as employed and unemployed during the reference week. [3] On the other hand, the generally accepted unemployment definition in the world is: *"Individuals of 15 years of age or older who are outside of employment during the reference week, who have used at least one of the job search channels to seek employment in the last 4 weeks and who can start work within 2 weeks"* [4] are considered unemployed.

The comparative analysis included only the unemployed, the employed and those outside of the workforce due to limitations such as a dataset which did not contain the question relating to the effect that we wanted to analyse in a clear manner, variations in the questions and/or responses, and majority of the sample being made up of people outside of the workforce.

In the Life Satisfaction Survey by TUIK, the responses "*1-Extremely Happy, 2-Happy, 3-Average, 4 – Unhappy, 5-Extremely Unhappy*" given for the question "How Happy Are You When You Consider Your Life as a Whole?" has enabled us to measure happiness. The target population of the survey is individuals who are 18 years and older. In this study, *Least Square Method (LSM)* was used. "*STATA 14.2*" package software was used for the analysis. The life satisfaction question was integrated into the model as "*1-Extremely Unhappy, 2-Unhappy, 3-Average, 4-Happy, 5-Extremely Happy*".

 In the model, while life satisfaction was designated as a dependent variable, independent variables included gender (1= Male, 2=Female), age (18-24, 25-34, 35-44, 45-54 and 55-64), income group (1,2,3,4,5,6), educational background (didn't graduate, primary school, high school and higher education), marital status (never married, married, divorced, deceased spouse), geographical location (rural, urban or city or municipality, not a municipality), employment expectations in the country for the following year (It will be better, It will be worse, It will remain unchanged, will not work).

The model also included dummy variables in order to measure factors and constant effects that cannot be observed. A robust check was performed in order to solve the heteroscedasticity problem born out of the structure of cross-sectional data. Due to the limitations and challenges of the dataset, it was not possible to use a single model for all the years in the dataset, and instead we had to use a pooled analysis. The descriptive of the study is presented in appendix Table A1.

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3   For detailed information: TÜİK, https://www.tuik.gov.tr/.

4   For detailed information: TÜİK and International Labour Organization, https://www.tuik.gov.tr/ , https://www.ilo.org/global/lang—en/index.htm.

4.3. Econometric Findings

Using the Ordinary Least Squares (OLS) method in the model, primarily unemployment-life satisfaction analysis was performed using pooled cross-sectional data, life satisfaction analysis of expectations was done with the data from 2013 based on age groups and genders, and unemployment-life satisfaction analysis was performed for 2013 based on cities, after which a regression analysis was performed on the age group 18-64 as a whole and separately on the unemployed regarding their employment expectations and life satisfaction. A regression analysis was applied as a single model for questions about employment for the following year due to the low correlation between employment expectations about the country and personal employment expectations.

Table 4 shows the comparative life satisfaction of the unemployed and people outside of the workforce for years 2003-2008, 2009-2012, 2013 and 2014-2018. [5] There is a negative correlation between unemployment and happiness as expressed by the literature. This can be explained by the negative impact of being unemployed on a person's life satisfaction.

Table 4: Estimate Results of the Main Model for the Years 2003-2008, 2009-2012, 2013 and 2014-2018

Dependent Variable	Regression 1: 2003-2008		Regression 2: 2009-2012		Regression 3: 2013		Regression 4: 2014-2018	
Life satisfaction (1-5)	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E
Employment Status								
Unemployed	-0.314***	(0.0261)	-0.337***	(0.0327)	-0.313***	(0.0123)	0.312***	(0.0233)
Outside of the workforce	0.0506***	(0.0122)	0.0424*	(0.0168)	0.0224***	(0.00658)	0.0208	(0.0125)
Number of Observations	25732		19913		126558		34005	
Adjusted R^2	0.102		0.117		0.097		0.101	

Standard errors are given in parenthesis.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ indicate levels of significance.

*Employed people have been taken as a point of reference.

**People outside of the workforce include housewives, students, retirees, people unable to work due to health reasons, rentiers etc.

*** The controls are mentioned in section 4.2 and provided in appendix table A2

Number of observations for the year 2013 is higher than all the other years (196.203). Due to the higher number of observations, sub-regressions were applied for age groups and gender

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5   For detailed analysis please see; Kanlıoğlu, M.B., (2021). "Türkiye'de İstihdam-İşsizlik ve Mutluluk Arasındaki İlişkinin Analizi: 2003-2018". (Yayımlanmamış yüksek lisans tezi). Marmara Üniversitesi Sosyal Bilimler Enstitüsü İktisat Anabilim Dalı, İstanbul.

only for the year 2013. The impact of the personal employment expectations and employment expectations about the country for the following year on happiness were measured according to age groups and gender. Once again, the age group 18-64 was taken into consideration and people over the age of 65 were taken as missing values. People who replied, "Will remain unchanged" both for personal employment and for employment expectations for the country were taken as the reference group and those who replied "No idea" were taken as missing value. Accordingly, while positive happiness was observed in all age groups who said they expected to have better employment both personally and for the country for the following year, negative happiness was observed in those who said it will be worse. This was explained in literature stating that people who have positive expectations about employment are happier compared to those with negative expectations (De Juan and Mochón, 2014).

The proportion of those who replied to the question about personal employment expectations as "will not work" is insignificant for the age groups 35-44 and 45-54. On the other hand, while this situation leads to a negative life satisfaction only for the age group 55-64, it can be said to cause a positive life satisfaction for the age groups 18-24 and 25-34. Despite being considered to be the age group approaching retirement, not working in the age group 55-64 is thought to negatively affect happiness both as a result of a lack of income and because of the negative situations that can arise out of spending one's time in places such as the house. On the other hand, the positive life satisfaction for the age group 18-24 brought on by the fact that they will not be working is thought to be caused by the composition of the group which is mostly young people who have a desire to continue their education and who live with their families. For the age group 25-34, a positive impact on happiness because of not working might be caused by a group of people who will continue their education and by them being relatively young.

For the question about personal employment for the following year; while the age group 25-34 are happier among the ones who responded it will be better, the age group 18-24 among the ones who said it will be worse are the least affected. In terms of the employment expectations for the country for the following year, this situation is as follows: While the 55-64 age group is happier among the ones who responded that it will be better, once again the age group 18-24 are affected less negatively among the ones who responded that it will be worse. In terms of gender, men are happier among the ones who responded that it will be better in both personal employments for the following year and for employment in the country in general for the following year while the impact on women is less among the ones who responded that it will be worse. The reasons as to why young people seem to be less negatively affected among the ones who responded "it will be worse" for the questions regarding both the personal employment for the following year and the employment in the country are thought to be the young having a more positive mentality compared to the other age groups, living with their parents, and having fewer financial responsibilities. On the other hand, the reasons why women are less negatively affected by both personal employment and the employment in the country are thought to be social reasons such as women being less included in the working life compared to men.

Table 5: Results of Expectations for the Year 2013 For Personal Employment and Employment in the Country

Dependent Variable: LS	Model (1): Ages 18-24	Model (2): Ages 25-34	Model (3): Ages 35-44	Model (4): Ages 54-54	Model (5): Ages 55-64	Model (6) Male	Model (7) Female
Personal employment expectations	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E
It will be better	0.115***	0.146***	0.140***	0.124***	0.118***	0.152***	00930***
	(0.0158)	(0.011)	(0.012)	(0.0146)	(0.0189)	(0.00842)	(0.00882)
It will be worse	-0.205***	-0.224***	-0.282***	-0.264***	-0.274***	-0.266***	-0.228***
	(0.0352)	(0.0229)	(0.0204)	(0.0229)	(0.0291)	(0.014)	(0.0179)
Not going to work	0.0732***	0.0750***	0.0287	-0.0159	-0.0437**	-0.0417**	0.0149
	(0.0187)	(0.0152)	(0.0147)	(0.0139)	(0.0144)	(0.0139)	(0.00791)
Expectations about employment in the country							
It will be better	0.0695***	0.0789***	0.0771***	0.0957***	0.108***	0.0948***	0.0760***
	(0.0152)	(0.0111)	(0.0115)	(0.0129)	(0.0149)	(0.00851)	(0.00774)
It will be worse	-0.105***	-0.156***	-0.169***	-0.213***	-0.237***	-0.220***	-0.146***
	(0.0171)	(0.0123)	(0.0125)	(0.0136)	(0.0165)	(0.00947)	(0.00835)
Observations	17622	31616	31114	26626	19580	58544	68014
Adjusted R^2	0.071	0.105	0.106	0.092	0.083	0.108	0.087

Standard errors are given in parenthesis.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ indicate levels of significance.

*Those who responded that it would remain unchanged were taken as a point of reference.

**Those who responded "no idea" are taken as missing value.

*** The age group 18-64 was taken as basis.

As the place of residence of the participants was asked at the city level only for the year 2013, it became possible to assess the unemployment rate of that place for this particular year by taking the data from TUIK. The unemployment rate by cities for the year 2013 was taken from TUIK to be included in the model. Accordingly, average unemployment rate in 2013 across cities was 9.16%. It has been stated in the literature that in places with high unemployment rates, the person

can feel like they are unemployed for reasons outside of their control, as a result of which their life satisfaction is affected less negatively (Clark, 2003). In order to test this hypothesis, the life satisfaction of people for 2013 in places where unemployment rate was higher than average (>9,16) and lower than average (<9,16) is shown in Table 6.

Table 6: Results by Cities for the Year 2013

Dependent Variable: LS	Model 1: >9,16		Model 2: <9,16	
	Coefficient	Robust S.E	Coefficient	Robust S.E
Outside of the workforce	0.0245*	(0.011)	0.0147	(0.00832)
Unemployed	– 0.284***	(0.019)	– 0.319***	(0.0162)
Observations	50990		75568	
Adjusted R^2	0.108		0.104	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ indicate levels of significance.

Standard errors are given in parenthesis.

Employed people have been taken as a point of reference.

Accordingly, when we take employed people as a point of reference, being unemployed for individuals living in cities where the unemployment rate is higher than average lowers life satisfaction – 0,284 point on average. On the other hand, being unemployed for individuals living in cities where the unemployment rate is lower than average lowers life satisfaction – 0,319 point on average. We can say that life satisfaction of people living in cities where unemployment rate is lower than the average is lower. The unemployed person living in places where the unemployment rate is high may be looking at the other unemployed people around them to conclude that their circumstance might have other causes, which in turn affects them less negatively. This is in support of the literature (Clark,2003).

Table 7 indicates life satisfaction of the age group 18-64 for the years 2003-2008,2009-2012, 2013 and 2014-2018 for the entirety of the employed, the unemployed and those outside of the workforce according to their expectations regarding their personal employment and employment in the country for the following year. TUIK asks the expectations regarding the working life with these questions: "How will work/employment situation be next year in Turkey?" "1-It will be better," "2-It will remain unchanged", "3-It will be worse" "4-No idea". In 2003, the employed were only asked about their personal employment expectations, between 2003-2008, the responses stated, "not working" as opposed to "not going to work", which was the case for 2009-2018. The question about personal employment expectations as of 2009 was phrased in the following way: "How will your personal work/employment situation be next year?" "1-It will be better," "2-It will remain unchanged", "3-It will be worse" "4-No idea", "5-Not going to work". In order to ensure homogeneity, expectations about employment for the country was taken into consideration between 2003-2008, and for 2009-2018 expectations for both personal employment and

employment in the country were taken into consideration. We aimed to analyse the relationship between expectations about working life and life satisfaction in the light of the data.

In Table 7 those who replied, "Will remain unchanged" for the questions regarding expectations about employment were taken as a point of reference while those who replied "No idea" were taken as missing value. Due to the low correlation of the questions regarding expectations about personal employment and employment in the country amongst themselves, questions for years 2009-2012,2013 and 2014-2018 were analysed under a single model.

Accordingly, when those who replied to the question regarding the expectations about employment in the country as "Will remain unchanged" are taken as a point of reference, it was observed across all 4 pooled models that there was a positive impact on the life satisfaction of those who said, "It will be better" and a negative impact on the life satisfaction of those who said, "It will be worse". TUIK started to measure homogeneously the personal employment expectations of the individuals as of 2009. What sets this study apart from others in the literature is especially the expectations about personal working life and happiness. Accordingly, when people who replied to the question about their employment expectations for the following year as "Will remain unchanged" in the years 2009-2012, 2013 and 2014-2018 were taken as a point of reference, we observed a positive impact on life satisfaction for those who replied, "Will be better" and a negative impact for those who replied, "Will be worse". The respondents of the expectations about the employment in the country for the following year and respondents of personal employment expectations for the following year consist of the same people; however, the people change from year to year as the data is cross-sectional. When expectations about the employment in the country and personal employment expectations are compared within the same years, for 2009-2012 and for 2013, those who said their personal employment will be better were happier than those who said the employment in the country will be better, which was not the case for 2014-2018. In other words, for the years 2014-2018 those who said the expectations about employment in the country will be better had higher life satisfaction than those who said their personal employment will be better.

For those who said it will be worse, it was observed across all pooled models that those who said their expectations about the employment in the country will be worse were relatively less affected than those who said their expectation about their personal employment will be worse. The fact that those with a negative expectation towards the employment situation in the country were less negatively affected can be explained with a way of thinking which suggests "if the employment situation is bad for everyone, if the people around me are in the same situation as I am, then my happiness will not be affected that much".

Table 7: Results Based on the Expectations Regarding Employment in the Country and Personal Employment Expectations for the years 2003-2008, 2009-2012, 2013 and 2014-2018

Dependent Variable	Regression 1: 2003-2008		Regression 2: 2009-2012		Regression 3: 2013		Regression 4: 2014-2018	
Life satisfaction (1-5)	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E
Expectations about employment in the country								
It will be better	0.123***	(0.0131)	0.101***	(0.0144)	0.0860***	(0.00573)	0.145***	(0.0114)
It will be worse	-0.161***	(0.0119)	-0.161***	(0.0143)	-0.181***	(0.00627)	-0.151***	(0.0111)
Personal Employment Expectations								
It will be better			0.120***	(0.0155)	0.127***	(0.00608)	0.119***	(0.0114)
It will be worse			-0.311***	(0.0266)	-0.258***	(0.011)	-0.331***	(0.0199)
Not going to work			-0.00401	(0.0174)	0,011	(0.00673)	0.0115	(0.0138)
Number of Observations	25732		19913		126558		34005	
Adjusted R^2	0.102		0.117		0.097		0.101	

Standard errors are given in parenthesis.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ indicate levels of significance.

*Those who responded that it will remain unchanged were taken as a point of reference.

**Those who responded "no idea" were taken as missing value

*** The age group 18-64 was taken as basis.

Since the personal employment expectations and expectations about employment in the country for the employed, the unemployed and people outside of the workforce in the age group 18-64 were generally taken into consideration and after the estimates, essentially the life satisfaction of the unemployed was analysed, the expectations of the unemployed towards employment were also examined. We believe that this study differs from the others in the literature as it analyses the expectations of only the unemployed towards employment.

Table 8 shows the personal employment expectations and expectations about employment in the country in the following year for unemployed people across all years. Those who said it will be the same were taken as a point of reference and those who said "no idea" were taken as missing value. Despite having the same respondents for the questions about employment expectations in the country and personal employment expectations, employment expectations in the country and personal employment expectations were analysed in a single model like in the previous table due to the low correlation. Accordingly, in the model, those you replied that the employment expectation in the country will be better in 2003-2008 and 2009-2012; those who replied that the employment expectation in the country will be worse in 2009-2012 as well as those who replied "Not going to work" for the question about their personal employment expectations in 2009-2012 and in 2013 were insignificant. Similarly, having better employment expectations in the country and better personal employment expectations positively affect the life satisfaction of the unemployed while it has a negative effect for those who said it will be worse. The unemployed

who stated that their personal employment expectations will be better were happier than those who said the employment expectations in the country will be better; whereas those who said the employment expectations in the country will be comparatively worse than their personal employment expectations were less negatively affected. Therefore, we can say that a more positive personal expectation in unemployed people with an optimistic expectation and a negative expectation in the unemployed people regarding the employment expectations in the country make the unemployed people happier.

Table 8: Estimate Results of Employment Expectations in the Country and Personal Employment Expectations of the Unemployed Across the Years

Dependent Variable: LS	model 1: 2003-2008	model 2: 2009-2012	model 3: 2.013	model 4: 2014-2018
Life satisfaction (1-5)	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E	Coefficient Robust S.E
Expectations about employment in the country				
It will be better	0.114	0.0752	0.0953**	0.169**
	(0.0661)	(0.0838)	(0.0299)	(0.0606)
It will be worse	-0.201***	-0.144	-0.206***	-0.0763
	(0.0554)	(0.0774)	(0.0303)	(0.0538)
Personal Employment Expectations				
It will be better		0.200**	0.141***	0.201***
		(0.0749)	(0.0285)	(0.0546)
It will be worse		-0.328***	-0.271***	– 0.367***
		(0.0975)	(0.0389)	(0.0758)
Not going to work		-0.0605	0.0199	0.519***
		(0.157)	(0.0597)	(0.153)
Observations	1494	886	7105	1650
Adjusted R^2	0.077	0.121	0.096	0.119

Standard errors are given in parenthesis.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ indicate levels of significance.

*Those who responded that it will remain unchanged were taken as a point of reference.

**Those who responded "no idea" were taken as missing value.

*** The unemployed people between ages 18-64 were taken as basis.

5. Conclusion

This study aims to analyse the relationship between happiness and unemployment, expectations towards employment in the country in the following year and personal employment expectations using pooled regressions with the dataset from the Life Satisfaction Survey by the Turkish Statistical Institute between 2003-2018. STATA 14.2 package software was used in the study and methodology included the application of Ordinary Least Squares (OLS) on the pooled years. [6]

 Even though studies about expectations and happiness exist in the literature, this study contribute as there seems to be no studies which address the expectations towards employment from two different aspects as the expectations about the country and personal expectations. Even though the dataset of the Life Satisfaction Survey is cross-sectional, a longer period was selected in order to be able to see the trends. Throughout the years, many questions, and the sample size, especially in 2013, was changed by TUIK. In 2013, which included 196.203 observations, the "city" variable was also added to the survey for the first time. Therefore, the relationship between happiness, and personal employment expectations and employment expectations for the country for the following year for people in the age group 18-64 were also analysed according to gender and age group though sub-regressions for this year.

Unemployment remains a significant topic in the world today as it was in the past. The cost of unemployment is not only incurred by the individual, but also by the society in which the individual lives as well as those governing that society. In addition to financial costs, unemployment also causes psychological costs. Being unemployed negatively affect not only the individual's economic situation, but also their quality of life and happiness.

In the light of the results, we have found a correlation between life satisfaction and unemployment. Despite the limitations of the dataset, it is possible to say that the unemployed were less happy than the employed and those outside of the workforce. On the other hand, when people who responded to the questions about the employment expectations in the country and their personal employment expectations as "It will remain unchanged" were taken as a point of reference, a positive life satisfaction was observed in those who replied that it will be better; whereas a negative life satisfaction was observed in those who replied that it will be worse. These results are also valid for the unemployed.

References

Ahn, N., García, J. & Jımeno,J.(2004).The Impact of Unemployment on Individual Well-Being in The Eu, European Network of Economic Policy Research Institutes Working Paper No. 29, 1-19.

Andersen,S. (2009). Unemployment and Subjective Well-Being a Question of Class?, Work and Occupations, 36(1), 3-9.

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6   The results of the model were also tested using the ordered probit/logit method, which didn't yield considerable difference in terms of coefficients. Therefore, only the OLS results were included in the article.

Angeles, L. (2010). Adaptation and Anticipation Effects to Life Events in the United Kingdom, Discussion Paper, 1-10.

Aysan, F.M. & Aysan, U., (2017). The Effect of Employment Status on Life Satisfaction in Europe, Empirical Studies on Economics of Innovation, Public Economics and Management,6,335-347.

Caner,A. (2015).Happiness, Comparison Effects, and Expectations in Turkey, Journal of Happiness Studies , 16,1323-1345.

Carroll,N. (2005). Unemployment and Psychological Well-Being, The Australian National University Centre For Economic Policy Research Discussion Paper No.492, 1-36.

Chen, WH. & Hou, F. (2019). The Effect Of Unemployment On Life Satisfaction: A Cross National Comparison Between Canada, Germany, The United Kingdom And The United States, Applied Research in Quality of Life, 14, 1035-1058.

Clark, A. E.(2003). Unemployment as a Social Norm: Psychological Evidence from Panel Data, Journal of Labor Economics, 21(2), 323-351.

Clark, A.E.& Oswald, A.J. (1994). Andrew J. Unhappiness and Unemployment,, The Economic Journal, 104(424), 648-659.

De Juan, R., Mochón, F., & Rojas, M. A. R. I. A. N. O. (2014). Expectations and happiness: Evidence from Spain. Journal of Social Research & Policy, 5(2), 89-102.

Feather, N.T. & O'Brien, G. E.(1986). A Longitudinal Study of the Effects of Employment and Unemployment on School-Leavers, Journal of Occupational Psychology, 59(2), 121-144.

Gallie,D. & Russell,H. (1998). Unemployment and Life Satisfaction: A Cross-Cultural Comparison ,European Journal of Sociology, 39(2), 248-280.

Gao, W. & Smyth,R.(2011). What keeps China's migrant workers going? Expectations and happiness among China's floating population, Journal of Asia Pasific Economy, 16(2),163-182.

ILO: , https://www.ilo.org/global/lang—en/index.htm.

IMF (2020). World Economic Outlook: a Long and Difficult Ascent, Wasington, 57. https://www.imf.org/en/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020

Kassenboehmer, S. C. & Haisken-DeNew, J.P. (2009). "You're Fired! The Causal Negative Effect of Entry Unemployment on Life Satisfaction,, The Economic Journal, 119(536), 448–462.

Kuzu, S., Atay,E.S.,Gercek,M. (2019). The Analysis of Unemployment, Happiness and Demographic Factors Using Log-Linear Models, Internatinal Journal of Economics and Business Research, 17(1),87-105.

Michalos, A.C.(1980).Satisfaction and Happines, Social Indicatiors Resarch, 8(4), 385-422.

Møller,V.(1996). Life satisfaction and expectations for the future in a sample of university students: A research note, South African Journal of Sociology, 27(1),16-26.

Ohtake, F.(2012). Unemployment and Happiness, Japan Labor Review, 9(2), 59-74.

Stam, K., Sieben, I., Verbakel, E., & de Graaf, P. M. (2015). Employment Status and Subjective Well-Being: The Role of The Social Norm to Work, Work, Employment & Society, 30(2), 309-333.

Stewart, C.D. (1950). The Definition of Unemployment, The Review of Economics and Statistics, 32(1), 55-59.

Susanlı, B.Z.(2018), Life satisfaction and unemployment in Turkey: evidence from Life Satisfaction Surveys 2004–2013, Quality & Quantity, International Journal of Methodology, Springer, vol. 52(1), pages 479-499, January.

Van der Meer, P. H., & Wielers, R. (2016). Happiness, Unemployment And Self-Esteem, Resarch Report, 16016, 1-6.

Vatter, J. (2012). Well-Being in Germany: GDP and Unemployment Still Matter, RatSWD Working Paper No.196, 1-33.

Veenhoven, R. ve Dumludağ,D.(2018). İktisat ve Mutluluk: Bugün Daha Mutlu muyuz?, İktisatta Davranışsal Yaklaşımlar, Derleyenler: Devrim Dumludağ, Özge Ökdemir, Levent Neyse, Ester Ruben, Ankara: İmge Kitabevi Yayınları, 223-251.

Winkelmann, L. & Winkelmann,R.(1995). Happiness and Unemployment: A Panel Data Analysis for Germany, Applied Economics Quarterly, 41(4), 293-307.

Winkelmann,R. (2009).Unemployment, Social Capital, and Subjective Well-Being, Journal of Happiness Studies,10,421–430.

World Database of Happiness : https://worlddatabaseofhappiness.eur.nl/.

Wulfgramm,M.(2014).Life Satisfaction Effects of Unemployment in Europe: The Moderating Influence of Labour Market Policy, Journal of European Social Policy ,24(3), 258– 272.

Appendix

Table A1: Descriptive Table of the Entire Sample for 2013*

Variable	Obs	Mean	Std. Dev.	Min	Max
Year	196,203	2013	0	2013	2013
Province	196,203	37.16659	21.90405	1	81
Gender	196,203	1.576592	0.4941002	1	2
Age	196,203	44.28938	16.38199	18	99
Marital Status	196,203	2.020667	0.6716568	1	4
Happiness	196,203	2.440549	0.8656127	1	5
Education	196,203	8.705244	11.99239	0	32
Employment Status	196,203	2.74137	2.117587	1	11
Personal Employment Expectations	172,605	2.783975	1.573679	1	5
Expectations about employment in the country	149,530	1.923046	0.8296089	1	3
Income group	196,203	2.21544	1.371294	1	5
Unemployment rate	196,203	9.160333	3.766325	4.2	23.4
Happiness [5 scale recode]	196,203	3.559451	0.8656127	1	5
Age**	170,406	3.032804	1.287495	1	5
Education**	196,203	1.206577	0.8973532	0	3
Happiness [0;10]	196,203	6.398628	2.164032	0	10

* Because the number of observations was higher in the relevant year, the results of 2013 were shown.

Table A2: Main Regression Estimation with Control Variables*

Dependent Variable	Regression 1: 2003-2008		Regression 2: 2009-2012		Regression 3: 2013		Regression 4: 2014-2018	
Life satisfaction (1-5)	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E	Coefficient	Robust S.E
Employment Status								
Unemployed	-0.314***	(0.0261)	-0.337***	(0.0327)	-0.313***	(0.0123)	-0.312***	(0.0233)
Outside of the workforce	0.0506***	(0.0122)	0.0424*	(0.0168)	0.0224***	(0.00658)	0.0208	(0.0125)
Women	0.0785***	(0.0115)	0.0563***	(0.0140)	0.0778***	(0.00576)	0.101***	(0.0107)
Countryside	0.0244*	(0.0123)	0.0831***	(0.0148)			0.0202	(0.0197)
25-34	-0.194***	(0.0183)	-0.176***	(0.0217)	-0.183***	(0.00900)	-0.192***	(0.0170)
35-44	-0.268***	(0.0200)	-0.310***	(0.0239)	-0.300***	(0.00971)	-0.292***	(0.0183)
45-54	-0.293***	(0.0211)	-0.338***	(0.0248)	-0.318***	(0.0101)	-0.341***	(0.0190)
55-64	-0.279***	(0.0247)	-0.281***	(0.0268)	-0.249***	(0.0108)	-0.278***	(0.0202)

Primary school			0.0938***	(0.0272)	0.0476***	(0.00865)	0.0563**	(0.0177)
Highschool	0.0405**	(0.0135)	0.102***	(0.0297)	0.0636***	(0.0102)	0.108***	(0.0200)
Higher Education	0.0653***	(0.0177)	0.159***	(0.0319)	0.0850***	(0.0112)	0.193***	(0.0204)
Income group2	0.211***	(0.0193)	0.169***	(0.0215)	0.103***	(0.00679)	0.0347*	(0.0137)
Income group3	0.300***	(0.0200)	0.284***	(0.0212)	0.136***	(0.00692)	0.0500***	(0.0129)
Income group4	0.377***	(0.0200)	0.345***	(0.0225)	0.204***	(0.00736)	0.0462***	(0.0133)
Income group5	0.506***	(0.0220)	0.394***	(0.0260)	0.283***	(0.00867)	0.0882***	(0.0139)
Income group6	0.597***	(0.0273)	0.529***	(0.0305)				
Year1	-0.185***	(0.0188)	0.0214	(0.0170)			-0.0111	(0.0149)
Year 2	-0.164***	(0.0185)	0.0192	(0.0164)			0.0617***	(0.0148)
Year 3	-0.108***	(0.0187)	0.00339	(0.0162)			0.0331*	(0.0146)
Year4	-0.104***	(0.0184)					0.0274	(0.0147)
Year 5	-0.140***	(0.0190)						
Never Married	-0.309***	(0.0178)	-0.308***	(0.0199)	-0.261***	(0.00829)	-0.280***	(0.0151)
Widow	-0.456***	(0.0464)			-0.368***	(0.0171)	-0.442***	(0.0330)
Divorced	-0.597***	(0.0500)	-0.366***	(0.0457)	-0.525***	(0.0178)	-0.489***	(0.0287)
Separate	-0.710***	(0.102)						
Country working expectations:								
Will be better	0.123***	(0.0131)	0.101***	(0.0144)	0.0860***	(0.00573)	0.145***	(0.0114)
Will be worse	-0.161***	(0.0119)	-0.161***	(0.0143)	-0.181***	(0.00627)	-0.151***	(0.0111)
Personal working expectations:								
Will be better			0.120***	(0.0155)	0.127***	(0.00608)	0.119***	(0.0114)
Will be worse			-0.311***	(0.0266)	-0.258***	(0.0110)	-0.331***	(0.0199)
Wil not work			-0.00401	(0.0174)	0.0110	(0.00673)	0.0112	(0.0138)
Constant	3.620***	(0.0286)	3.488***	(0.0395)	3.681***	(0.0142)	3.649***	(0.0288)
Number of Observations	25732		19913		126558		34005	
Adjusted R^2	0.102		0.117		0.097		0.101	

Note: Standard errors in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$