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THE DETERMINANTS OF THE PERCEPTION  
OF HAPPINESS ABOUT QUALITY  
OF LIFE AMONGST TURKISH PEOPLE

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Working Paper No. 425

# **The Determinants of the Perception of Happiness about Quality of Life amongst Turkish People**

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## Abstract

Happiness and life satisfaction are two empirically correlated but conceptually different determinants of quality of life. It has been theorized that happiness is an affective construct, whereas life satisfaction is a cognitive one. According to the recent literature, substantial levels of similarities are found among the determinants of satisfaction and happiness with life as a whole from satisfaction of various specific domains (such as family and health). Using the Life Satisfaction 2006 Study: Household and Individual by the Turkish Statistical Institute we examine the determinants of happiness among Turkish people. We estimate an ordered probit model and our results suggest that higher income and having a job are two crucial determinants of happiness. Male and married people are happier than singles and females. Less educated people are happier than university educated people. If we exclude Easterling paradox, the findings of this paper confirm that there is not a big difference between developing and developed countries when it comes to determinants of happiness.

## ملخص

إن السعادة والرضا عن الحياة هما محددان لنوعية الحياة مترابطان تجريبيًا لكنهما مختلفان في المفهوم. ولقد وضعت نظريات تقر بأن السعادة منشأ وجداني، في حين أن الرضا عن الحياة هو منشأ معرفي. وطبقاً لكتابات حديثة وجدت درجات كبيرة من التشابه بين محددات السعادة والرضا عن الحياة ككل، من ناحية، والرضا عن مجالات معينة (مثل الأسرة والصحة) من ناحية أخرى. وباستخدام دراسة "الرضا عن الحياة 2006: الأسرة والأفراد" التي أجراها المعهد التركي للإحصاء، نجد أننا نريد أن نختبر محددات السعادة عند الأترك. فقد تم تقدير نموذج مرتب لوحدة احتمالية وأشارت النتائج إلى أن وجود دخل مرتفع والحصول على وظيفة يعتبران محددين مهمين في السعادة. فنجد أن الذكور والمتزوجين أسعد من الإناث والعزاب. كما نجد أن المتعلمين تعليماً متوسطاً أسعد من الذين تلقوا تعليمياً جامعياً. فإذا استثنينا مُحيرة إيسترلينج نجد أن نتائج الورقة فيما يتعلق بمحددات السعادة تؤكد عدم وجود فروق كبيرة بين الدول النامية والدول المتقدمة.

## I. Introduction

Quality of Life studies has been an emerging discipline in the economic, social, medical, and administrative sciences over the last few decades. It is an offshoot of the social indicators movement first originated in economics and sociology (Sirgy 2001). Earlier inquiries had mainly focused on micro and macroeconomic variables such as consumer's well being through utilization of various goods, individual income, unemployment, inflation and income growth. In time, many economists and sociologists grew dissatisfied with traditional economic indicators as measures of societal development. This gave way to contemporary studies of Quality of Life (QoL from now on), which includes other measures besides pure economic indicators, such as psychological satisfaction, happiness or life fulfillment. As a result, interest in QoL was spread to the applied economic, social and administrative sciences with an increasing tendency since the beginning of 1980.

One of the issues considered by psychologists was the difference between happiness and life satisfaction. They have distinguished *happiness* and *life satisfaction* as two different constructs but both the determinants of QoL (Andrews and McKennell 1980). They have theorized that happiness is an affective construct, whereas life satisfaction is a cognitive one. Life satisfaction involves one's evaluation of one's life or life accomplishments against some objective standards. These standards could be listed as per capita income, wealth, unemployment, education measured by literacy or school attendance, health, life expectancy, living conditions, mobility, etc.

Some researchers argued that income plays a significant role in the enhancement of QoL. For example, research found that across many countries per capita income is positively related to the following QoL indicators: civil liberties, democracy (Barro 1996), health, infant mortality, and life expectancy (Barro and Sala-I-Martin 1995), schooling quality (Barro and Lee 2000), trust between individuals in society (Knack and Keefer 1997) and subjective well being (Diener and Suh 1997). It has also been hypothesized (Sirgy 2001) that income contributes to subjective well being in developed countries.

Amartya Sen(1993) views QoL in terms of environmental conditions that allow people to become *capable* of helping themselves and enriching their own lives. For example having good education, being able to plan one's life based on reasonable stable expectations, effectively use health care services, enforce one's legal rights, engage more effectively in political decision making are the necessary preconditions for happiness.

Allardt proposed an approach to QoL based on meeting certain *basic needs*. Examples include: economic resources (need for a minimal level of personal income), housing conditions (need for available space and housing), employment (need for a job), health (need for the availability of medical aid) and education (need for formal schooling). Loving needs are defined as needs to relate other people and form social identities. Examples include friendships, socializing with fellow members in organizations and/or groups and relationships with work mates. Being needs are defined as needs for integration into society and living in harmony with nature. Examples include involvement in political activities, leisure activities, making decisions about one's life and the lives of loved ones.

Regarding empirical studies, Dasgupta and Majumdar(2000), measured life satisfaction of Calcutta residents and their satisfaction with various life domains. Tsou and Liu (2001) conducted a research on Taiwan. In this study, they looked at various determinants of happiness and satisfaction amongst Taiwanese people in a number of life domains. One of the other empirical studies regarding 17 Latin American countries is Graham and Pettinato (2001). Similar to the studies mentioned above, Graham and Pettinato explored the socio-demographic determinants of happiness, and took a look at age, income, employment, marital status and education levels. In this study ordered logit was used and a standard regression

model, in which happiness is a function of a number of demographic variables, was developed.

Motivated by the reviewed literature and data availability from the Life Satisfaction 2006 Study; Household and Individual conducted by Turkish Statistical Institute (TUIK), this study intends to examine the determinants of happiness among Turkish people using several life domains using an ordered probit model. To our knowledge, there are no other research papers on these issues in Turkey, particularly ones using this new survey data. In this sense we believed that this study will contribute to the factors that shape individual happiness of the Turkish people with specific domains.

The rest of the paper is organized as follows. In section 2 we describe the methodology and the data. Section 3 presents the estimation results of the ordered probit regression and section 4 concludes. The appendix provides more information on the data and the sampling information.

## **2. Methodology and Data**

In this paper, we use data from the Life Satisfaction 2006 Study; Household and Individual conducted by Turkish statistical Institute (TUIK) and our estimation technique is the ordered probit model. In what follows we first introduce the questionnaire and the type of questions that were asked. Secondly, we will explain the determinants of the perception of happiness with life using the previous literature and particularly referring to questions asked in the survey.

### ***2.1 Questionnaire and Type of Questions***

Two different questionnaires were used in Life Satisfaction 2006 Study; Household and Individual.

#### *Household Questionnaire*

1. Main characteristics of the household individuals (sex, age, relation to household head)
2. Main characteristics of household members who were away from house at least six months (sex, age, relation to household head, financial interactions with household members)
3. Household income, social support and house (household income, social support received by the household, characteristics of the house, satisfaction from house-related services, problems, educational problems experienced by parents of kids less than 18 years of age)

#### *Individual Questionnaire*

1. Main characteristics (age, sex, marital status)
2. General happiness, hopes for the future, expectations
3. Satisfaction in main domains of life and of public services
  - 3.1. Health and social security
  - 3.2. Education
  - 3.3. Work life and income
  - 3.4. Individual security and justice services
  - 3.5. Personal environment and personal support networks

In general, two types of questions were asked: factual (age, sex, occupation, public service received) and perceptual (satisfaction with own health). Copies of the questionnaires are

available on Turkish Statistical Institute's web page (<http://www.tuik.gov.tr>). For more information about the sampling and data please see the appendix of this paper.

## **2.2 The Determinants of “The Perception of Happiness about Life”**

In this section we aim to examine the determinants of happiness basically summarized under the broad headings of wealth, material living conditions, individual's characteristics, social relations, educational attainment, the employment related questions and environment of life following in the footsteps of a corresponding question available in the questionnaire.

Our dependent variable is: How happy are you when you think of your life as a whole?

The independent variables are grouped in categories that allow us to follow the literature:

Individual's characteristics: To capture the personal characteristics of the individual we include their sex and age. Following the literature on the nonlinearity possibly associated with age we also include a squared term of age in the analysis.

Social relations: The social network to which the individual feels he belongs said to have a bearing on the happiness level of the individual. As such we include the marital status of the individual. Due to the extent of missing data we are unable to include other possible social relation measures about the community and the size of family.

Educational attainment: Here we are able to include alternative measures, one is a basic literacy measure while the other looks into the educational attainment according to the last school attended by the respondent.

Employment related questions: A measure of the individual's type of work and whether he or she is satisfied with that work is included. What kind of economic activity does your work place rest on. How satisfied are you with your job?

Environment of life: Issues of security and the legal environment are included to capture the role of the external, community level factors in influencing the life satisfaction of the individual. How secure do you feel when you are alone at home? In your neighborhood, how secure do you feel when walking alone at night? How satisfied are you with the security? How satisfied are you with the juridical system?

Health status: Indicators of health status and the individual's level of content regarding health are both included in the analysis. Do you have any health problems that prevent you from daily activities?\_Do you have any handicap? How satisfied are you with your health in general?

Future outlook: Can you tell me how hopeful you are about the future?

## **3. The Results**

We begin our analysis by examining the determinants (characteristics) of happiness on the individual level. Happiness is measured on ordinal (Likert) scale, for which either ordered probit or ordered logit models are the most appropriate econometric techniques. Our ordered probit parameter estimates for explaining happiness and related model fitting diagnostics are provided in Table 1<sup>1</sup>. When interpreting the results for the individual level variables, age seems to be one of the determinants of happiness — one additional year increases the chance of being happy by .08 times. We also find that age has a non-linear, U shaped relationship. The non-linear shape of the relationship between age and happiness is similar to that in Eastern Europe and Western countries, such as the UK and the US (Hayo 2007, Clark and Oswald 1994, 1996, Clark et al 1996, Blanchflower and Oswald 2000, Blanchflower and

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<sup>1</sup> Diagnostics suggest that our model fits the data very well.

Andrew 2007a,b). Except for individuals with an irregular type of education (namely those who obtained their diploma not by attending school but rather by taking the exams a while later than their cohorts), having a lower education increased the chance of being happy in comparison to having a masters or a PhD. It seemed that those with higher education were less happy than those with lower education. Primary (8years) and open high school educated people in particular appear to have higher levels of happiness, although the effect is non-monotonic. This finding is similar to the evidence reported by Clark and Oswald (1994, 1996) and Clark et al.(1996) on the UK. They reported that highly educated individuals showed greater distress (or less satisfaction) than others.<sup>2</sup> Marital status did not turn out to be important for happiness.<sup>3</sup> In theory, gender as part of the socio demographic group of factors is related to happiness but weakly correlated with it — knowing one's gender is not enough to evaluate a person's happiness level (see Sirgy et.al. 2006). There are mixed results where gender based happiness is concerned — that females are happier than males or other way round. In fact, Blanchflower et al (2005) and Inglehart (2002) found that females are happier than males. Contrary to the previous findings, we found that in Turkey males tend to be happier. This is quite expected for Turkey since males have better living and employment conditions than females. In addition, there are very big gender differences (gender inequality) between males and females in Turkey with regards to employment, income inequality and household responsibilities.

As expected, the employed were happier than the unemployed. Compared to unpaid family workers all people in various employment statuses were happier. In terms of job sector, those who worked in fishing, electricity/gas, water, construction and real estate/renting were happier than those who worked in “other social, societal and individual service jobs”. One interesting question in the questionnaire was “What is it that makes you happiest in life?” responses of which indicated that money, work, love and power have a higher probability of making an individual happy.

Satisfaction with health produced rather unexpected results; compared to people who are never satisfied with their health, those indicated varying degrees of satisfaction seemed to have less chance to be happier. Responses to the marriage satisfaction questions were in the expected direction. Even those who were unsatisfied with marriage were 3.4 times happier compared to those who were never satisfied with their marriage. People who were satisfied with their education had less chance of being happy compared to those who were not satisfied with their education. It seems that being satisfied with one's residence does not automatically bring more happiness. Interestingly enough this finding is also valid for the neighborhood in which people live, jobs that they hold, salaries that they make and to some extent the total monthly household income they cumulate. Similar discrepancy between the satisfaction with the above mentioned domains and happiness seems also to exist in the relations with their social environment. Satisfaction with relation with household members and relatives lowers their likelihood of being happy compared to those who are never satisfied in their relationship with their household members and relatives. Satisfaction they find in relations with their friends, neighbors and at work increases the likelihood of being happier. It is interesting that having social security coverage does not make people who have it happier than those who have no coverage at all. People who feel very safe when alone at home have a higher chance of being happier, but this is not true for the case of walking alone.

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<sup>2</sup> According to the OECD report on Turkey, among all university graduates 12.5 percent were unemployed compared to 8.1 percent in Spain and around 7.5 percent in France and Poland. In addition, only 18.8 percent of those employed have a university degree, and having a PhD is not common in Turkey.

<sup>3</sup> In the main equation, the parameter of marital status is set to zero because it is found redundant. In order to see the relationship between marital statuses and happiness alone we re-estimated the probit model and found that married people seem to be happier than others (see Table 2 in Appendix 3).

#### **4. Conclusion**

This paper examines the determinants of happiness using the Life Satisfaction 2006 Study; Household and Individual conducted by the Turkish Statistical Institute (TUIK). Our estimation technique is the ordered probit model. The results presented in this paper suggest that male and married people are happier than singles and females with the different aspects of life. Less educated people are happier than university graduates. Responses to “What is it that makes you happiest in life?” suggest that money and having job are two crucial determinants of happiness. This is consistent with evidence found for the UK and Taiwan, see Clark (1996, 1997) Clark and Oswald (1996), and Tsou and Liu (2001). Similar to the findings of previous studies, which claim that employment status strongly affects happiness, we also find that having a job makes most people very content. Social relations – referring to relationships with other people – especially close personal relationships with family members, relatives, friends and neighbors are also important aspects for quality of life. In fact we find that the Turkish people’s satisfaction with relations, whether with friends, neighbors or at work, increase the likelihood of being happier. This finding suggests the importance of secondary relations for the Turkish people who are traditionally known for preferring primary to secondary relationships. The evidence indicates that Turkey is moving from community-type relationships to society-type relationships.

The above findings were for Turkey as a whole. In an ensuing research paper we plan to run the same ordered probit model for the rural versus urban areas and comparing the results with respect to the cultural characteristics of the two groups.



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**Table 1 Ordered Probit Estimates for Explaining Happiness in Turkey (2006)**

	Estimate	Std. Error	Wald	df	Sig.
Age	.087	.000	170578.825	1	.000
Age squared	-.001	.000	144637.843	1	.000
Marital status	0(a)	.	.	0	.
[Gender=Male]	.151	.001	16427.607	1	.000
[Gender=Female]	0(a)	.	.	0	.
Primary5	.315	.004	6654.536	1	.000
Primary8	.709	.005	21674.906	1	.000
Open Primary	-.527	.007	5124.679	1	.000
Junior HS	.454	.004	13509.705	1	.000
Vocational School	.217	.004	2570.718	1	.000
HS	.239	.004	3777.086	1	.000
Vocational HS	.422	.004	11624.396	1	.000
Open HS	.825	.007	14705.491	1	.000
Open education	-.166	.005	1091.417	1	.000
College	.157	.004	1591.000	1	.000
University	.251	.004	4199.226	1	.000
Mater/PhD.	0(a)	.	.	0	.
Employment=Employed	.199	.002	9235.777	1	.000
Employment=Not employed	0(a)	.	.	0	.
Regular waged/salaried	1.444	.007	38237.502	1	.000
Seasonal/temporary worker	1.482	.007	39854.479	1	.000
Employer	1.515	.007	41465.488	1	.000
Self-employed	1.423	.007	38026.064	1	.000
Family worker w/o pay	0(a)	.	.	0	.
Agriculture, fishing, forestry	-.179	.001	17469.159	1	.000
Fishing	.370	.005	5677.164	1	.000
Mining	-.704	.004	38920.465	1	.000
Manufacturing	-.042	.001	1364.938	1	.000
Electricity/gas/water	.068	.002	1017.231	1	.000
Construction	.148	.002	8167.206	1	.000
Trade	-.096	.001	6591.795	1	.000
Hotel and restaurants	-.099	.002	3063.942	1	.000
Transportation, storage and communication	-.085	.001	3443.506	1	.000
Financial sector	-.405	.004	10775.552	1	.000
Real estate, renting	.069	.005	198.556	1	.000
Public administration and defense, social security	-.089	.002	2910.866	1	.000
[Education	-.074	.002	1213.420	1	.000
Health and social services	-.252	.002	13362.139	1	.000
Other social, societal and individual services]	0(a)	.	.	0	.
Power	.042	.005	86.393	1	.000
Success	-.117	.003	1287.416	1	.000
Work	.220	.003	3979.965	1	.000
Health	-.009	.003	8.880	1	.003
Love	.082	.003	650.998	1	.000
Money	.364	.003	11225.204	1	.000

Other	0(a)	.	.	0	.
Very satisfied with your health	-.429	.003	18399.706	1	.000
Satisfied with your health	-.300	.003	10357.118	1	.000
Medium satisfied with your health	-.014	.003	21.703	1	.000
Unsatisfied with your health	-.041	.003	179.322	1	.000
Never satisfied with your health	0(a)	.	.	0	.
Very satisfied your marriage	2.096	.012	31911.688	1	.000
Satisfied with your marriage	2.487	.012	45166.014	1	.000
Medium satisfied with your marriage	2.752	.012	54767.315	1	.000
Unsatisfied with your marriage	3.479	.013	77384.010	1	.000
Never satisfied with your marriage	0(a)	.	.	0	.
Very satisfied your education	-.135	.003	2751.812	1	.000
Satisfied with your education	-.035	.002	443.005	1	.000
Medium satisfied with your education	-.037	.002	460.005	1	.000
Unsatisfied with your education	.185	.002	12813.984	1	.000
Never satisfied with your education	0(a)	.	.	0	.
Very satisfied your house	-.592	.003	39471.845	1	.000
Satisfied with your house	-.565	.003	46541.882	1	.000
Medium satisfied with your house	-.329	.003	14432.091	1	.000
Unsatisfied with your house	-.204	.003	5721.569	1	.000
Never satisfied with your house	0(a)	.	.	0	.
Very satisfied with your neighborhood	-.499	.003	30329.984	1	.000
Satisfied with your neighborhood	-.362	.003	18084.480	1	.000
Medium satisfied with your neighborhood	-.351	.003	14842.728	1	.000
Unsatisfied with your neighborhood	-.418	.003	21850.813	1	.000
Never satisfied with your neighborhood	0(a)	.	.	0	.
Very satisfied your job	-.568	.003	41555.093	1	.000
Satisfied with your job	-.528	.002	46127.407	1	.000
Medium satisfied with your job	-.428	.002	29410.741	1	.000
Unsatisfied with your job	-.368	.002	22682.406	1	.000
Never satisfied with your job	0(a)	.	.	0	.
Very satisfied your salary	-2.514	.009	83880.866	1	.000
Satisfied with your salary	-1.234	.007	28513.765	1	.000
Medium satisfied with your salary	-1.290	.007	31373.097	1	.000
Unsatisfied with your salary	-1.046	.007	20802.398	1	.000
Never satisfied with your salary	-.625	.007	7045.128	1	.000
[Salary other	0(a)	.	.	0	.
Very satisfied with monthly HH income	-.277	.005	2964.661	1	.000
Satisfied with your monthly HH income	-.250	.002	16137.725	1	.000
Medium satisfied with your monthly HH income	-.036	.002	372.998	1	.000
Unsatisfied with your monthly HH income	.103	.002	3517.593	1	.000
Never satisfied with your monthly HH income	0(a)	.	.	0	.
Very satisfied with relations of HH members	-3.031	.015	39894.289	1	.000
Satisfied with relations of HH members]	-2.788	.015	33895.998	1	.000
medium satisfied with relations of HH members	-2.524	.015	27554.095	1	.000
Unsatisfied with relations of HH members]	-2.527	.016	26147.257	1	.000
Never satisfied with relations of HH members	0(a)	.	.	0	.

Very satisfied with relations of relatives	-.488	.004	17057.184	1	.000
Satisfied with relations of relatives	-.442	.004	15861.926	1	.000
medium satisfied with relations of relatives	-.385	.004	11567.720	1	.000
Unsatisfied with relations of relatives	-.244	.004	4236.719	1	.000
Never satisfied with relations of relatives	0(a)	.	.	0	.
Very satisfied with relations of friends	1.549	.008	35189.394	1	.000
Satisfied with relations of friends	1.672	.008	42360.047	1	.000
Medium satisfied with relations of friends	1.653	.008	40873.757	1	.000
Unsatisfied with relations of friends	1.964	.009	52651.647	1	.000
Never satisfied with relations of friends	0(a)	.	.	0	.
Very satisfied with relations of neighbors	1.331	.005	78893.724	1	.000
Satisfied with relations of neighbors	1.111	.004	63328.982	1	.000
Medium satisfied with relations of neighbors	1.258	.004	79935.496	1	.000
Unsatisfied with relations of neighbors	.918	.005	40569.861	1	.000
Never satisfied with relations of neighbors	0(a)	.	.	0	.
Very satisfied with relations at work	.344	.005	3957.522	1	.000
Satisfied with relations of at work	.091	.005	299.152	1	.000
Medium satisfied with relations of at work	.176	.005	1081.885	1	.000
Unsatisfied with relations of at work	.090	.006	262.239	1	.000
Never satisfied with relations of at work	0(a)	.	.	0	.
[Pension Fund	-.263	.002	22475.147	1	.000
Social Security	-.241	.001	59796.639	1	.000
BAG-KUR	-.129	.001	12823.606	1	.000
No coverage	0(a)	.	.	0	.
Very safe alone at home	.188	.004	2837.227	1	.000
safe alone at home [BS35=2]	-.089	.003	694.085	1	.000
Medium safe alone at home	-.027	.003	62.941	1	.000
Unsafe alone at home	.381	.004	11802.281	1	.000
Very unsafe alone at home	0(a)	.	.	0	.
Very safe walking alone	-.408	.002	46966.862	1	.000
safe walking alone]	-.075	.001	2635.879	1	.000
Medium safe walking alone	.064	.001	1890.251	1	.000
Unsafe walking alone	-.178	.001	15643.216	1	.000
Very unsafe walking alone	0(a)	.	.	0	.

Link function: Probit.

a. This parameter is set to zero because it is redundant.

### Model Fitting Information

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Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	31906007.2			
Final	27205659.5	4700347.68	78	.000

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### Goodness-of-Fit

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	Chi-Square	df	Sig.
Pearson	73219794.7	6762	.000
Deviance	27205659.5	6762	.000

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### Pseudo R-Square

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Cox and Snell	.293
Nagelkerke	.324
McFadden	.147

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## Appendix 1

### Sampling and Data

**Geographical Coverage:** Geographically, the study covers all residential areas within the borders of the Turkish republic. These residential areas are divided in two strata as urban and rural. Urban is defined as residential areas with a population of 20,001 and above, while rural is defined as residential areas with 20,000 and under.

**People covered:** All Turkish citizens of 18 years and above living in the households of the Republic are covered. Some 2.6 percent of the institutional population is not included in the coverage. The institutional population includes people living in elderly houses, pension houses, dormitories, prisons, hospitals, hotels, kindergartens or the army.

**Sampling unit:** Eventual sampling unit is defined as household and individual.

**Sampling method:** Two-stage stratified cluster sampling.

**Sampling framework:** Two sources were used to construct the framework. For places where municipalities exist, *Form Population 1 of Enumeration Study* conducted in 2000 was used. For places with no municipality, blocks which were the sampling units in the first stage of the *General Population Census of 2000* were used as the sampling frame.

**Framework for eventual selection of sampling units:** The framework described above was used to select the eventual sampling units. Blocks which were proportional to population were selected from the blocks in the framework and within each block, and addresses were updated for the selection. Depending on the results of the updated addresses study, households were identified within each block.

**Pre-test study:** Pre-testing was conducted in the sub-districts of Ankara between 5 and 8 August 2003. Seventy three households representing urban households from central sub-districts of Ankara, Altındağ, Çankaya, Keçiören and Yenimahalle and 12 rural houses from Saray and Dağkaya villages of sub-district of Kazan were the sites of the pre-test. A total of 85 households were included in the study. Eighty five households and 164 individuals completed the questionnaires. Analyses of these questionnaires were performed for internal consistency along with gender and neighborhood division, as well as administration duration of the questionnaires, readability of questions and appropriateness of response categories.

**Fieldwork:** Fieldwork was realized in November 2003 as an additional module attached to *Household Budget Questionnaire* which was conducted between 4 and 16 November. In a total of 2140 households, 1503 of which were urban and 637 were rural, 5304 individuals were interviewed face-to-face.

## Appendix 2

### Descriptive Statistics

	N		Mean	Std. Deviation
	Valid	Missing		
GENDER	48166 089	0	1.51	.500
AGE	48166 089	0	39.88	15.570
Marital status	48166 089	0	1.90	.550
Education	48166 089	0	4.83	3.389
Employment/ unemployed	48166 089	0	3.20	2.077
Employment status	19337 618	28828471	2.16	1.480
Sectors/activiti es	19337 618	28828471	7.72	4.922
What makes you happy?	48166 089	0	4.04	.867
Health	48166 089	0	2.48	.954
Marriage	36316 116	11849973	1.87	.581
Education	39112 808	9053281	2.96	1.035
House	48166 089	0	2.39	.926
Neighborhood	48166 089	0	2.23	.796
Job	19337 618	28828471	2.51	.949
Salary	19337 618	28828471	3.44	1.261
Income	48166 089	0	3.18	1.051
Relation/HH members	48166 089	0	1.98	.788
Relation/relativ es	48166 089	0	2.15	.698
Relation/friend s	48166 089	0	2.00	.527
Relation/ neighbors	48166 089	0	2.12	.644
Relation/friend s at work	19327 750	28838340	2.12	.620
Social security	48166 089	0	2.60	1.048
Alone at home	48166 089	0	2.28	.918
Walking alone	48166 089	0	2.92	1.208



### Appendix 3

**Table 2 Ordered Probit Estimates for Explaining Happiness in Turkey (2006)**

Marital status		Estimate	Std. Error	Sig.
Never married	[BS1=1]	-.716	.003	.000
Married	[BS1=2]	-.838	.003	.000
Widow	[BS1=3]	-.423	.003	.000
Divorced	[BS1=4]	-.327	.003	.000
Separated	[BS1=5]	0(a)	.	.

a This parameter is set to zero because it is redundant.