Analysis of Factors Affecting the Life Satisfaction of Household Heads Living in Urban Areas: A Case of West Mediterranean Region

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Abstract

Since the early ages of history, individuals have sought life satisfaction and considered it as a life goal. Because of this fact, the term life satisfaction has kept its importance in time and has been the focus of many studies. Life satisfaction is seen as a positive value gained by an individual's own evaluation of the quality of life as a whole, therefore may be described as subjective. Nevertheless, studies made about life satisfaction use both subjective and objective indicators. Life satisfaction is partially conceptualized as the result of satisfaction related to various life fields such as work, family, health, etc. and it is assumed that the effects of environmental conditions highly help satisfaction related with life fields. When studies about life satisfaction are taken into consideration, it is notable that the term job satisfaction is generally emphasized. However, studies show that job satisfaction can explain only a few of the changes in life satisfaction. In this study, it is aimed to determine the socio-economic factors affecting the life satisfaction of household heads by using data from questionnaires and Logit model. "Unclustered Single-Stage Simple Random Probability Sampling Method" was used to apply the questionnaires to 490 household heads living in city centers of Antalya, Isparta and Burdur. In order to determine the probability of whether the household heads were satisfied with their lives or not, explanatory variables oriented to the current perceptions of household heads were included to the model in the study in addition to the demographic variables. Demographic variables were included to the model as the dummy

variable. Logit model was estimated by Maximum Likelihood Estimation method. According to the results of the analysis, life satisfaction of the household heads decreased with the increase of the size of the city. Similarly, increase in education level also decreased the probability of life satisfaction of the household heads. In addition, household heads with high income levels were happier than the ones with lower income. Similarly, if the spouse of the household head is either healthy, satisfied from job, or is a house wife, satisfied from marriage, then life satisfaction is determined to be higher than the household heads without the aforementioned spouse characteristics.

Keywords: Satisfaction, Life Satisfaction, Household Head, Logit Model, West Mediterranean Region.

1. INTRODUCTION

Life satisfaction, in its general sense, refers to the satisfaction felt by one with regard to his/her own life (Keser, 2005). In other words, it relates to which extent the person is pleased with the life he/she has (Guler and Emec, 2006). Life satisfaction is the emotional response of the person against the life defined as work, leisure and other non-work time and expresses a general attitude towards life (Dikmen, 1995; Keser, 2005).

Life satisfaction is defined as "the positive perception of one's own life according to the criteria determined by himself/herself" and as the conscious and cognitive perceptions of the person with respect to the quality of his/her own life (Gilman and Huebner, 2000).

Life satisfaction is also described as the positive value obtained when the individual evaluates the quality of his/her life as a whole (Ozdevecioğlu and Aktas, 2007). Therefore, it is possible to say that life satisfaction is subjective in essence as it is the product of the evaluation conducted by the individual with regard to his/her own life. However, both subjective and objective indicators are employed in the studies relating to life satisfaction (Cetin et al., 2003). Objective indicators are related to external conditions such as income level, accommodation conditions and quality of such conditions, crime rates and accessibility of health services. Subjective indicators include personal emotions of the individual with regard to his/her life conditions (Gilman and Huebner, 2000).

Life satisfaction is partially conceptualized as a result of the satisfaction in various spheres of life such as work, family and health and it is assumed that the impacts of environmental conditions on the life satisfaction substantially contribute to the satisfaction concerning the spheres of life (Rode, 2004).

Life satisfaction demonstrates the result obtained from the comparison of the expectations of the individual and the actual situation and generally includes the entire life of the individual as well as the various dimensions of that life; that is, it expresses the satisfaction generally felt for the individual's whole life rather than a certain situation (Sener, 2009). In the studies

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concerning life satisfaction, it is remarkable that job satisfaction is generally emphasized regarding life satisfaction. Considering the fact that individuals in today's world spend most of their time in the workplace, it may seem reasonable to accept the assumption that the life satisfaction of the individual is substantially affected by job satisfaction. Nevertheless, studies reveal that job satisfaction may explain approximately 5%-10% of the shifts in life satisfaction (Uyguc et al., 1998).

While there are different views on the relation between life satisfaction and job satisfaction and on the direction of such relation, it is notable that no conclusive results could be obtained regarding whether the relation between the two variables is positive or negative or whether there exists a relation between them although many studies were conducted on life satisfaction-job satisfaction. (Uyguc et al., 1998).

Considering the definitions regarding life satisfaction, it is possible to say that there exist many factors apart from job satisfaction that determine and affect the life satisfaction of individuals. It was found that life satisfaction is associated with factors such as possessing a meaningful life, enjoying life and having plenty of pursuits in life (Guler and Emec, 2006:131). On the other hand, factors including social connections, sexual activity, success, physical activity, interest in nature, reading or listening to music, nutrition or drink consumption make positive affective contributions to life satisfaction (Dockery, 2003). Some studies in the literature put forth that age, stress, physical health, life style and personality structure are among the basic determinants of life satisfaction (Chow, 2005). A consensus does not exist in the literature regarding the influence of income level on life satisfaction. Some studies emphasize the importance of the quality of social relations and relative insignificance of income on satisfaction. On the other hand, however, some other studies conclude that the income effect is significant for the level of life satisfaction (Dockery, 2003).

This research studies the satisfaction level of household heads. City centres of Antalya, Isparta and Burdur were chosen as the research field and it was aimed to determine the socio-economic factors that affect the satisfaction levels of household heads with the help of Logit model using the data obtained from questionnaire surveys conducted with household heads.

2. MATERIALS AND METHODOLOGY

Main material of this study is the cross-sectional data obtained through questionnaire survey method from household heads living in the West Mediterranean Region urban area (Antalya-Isparta-Burdur). Furthermore, national and international studies, publications, statistics and reports prepared by various institutions and organizations concerning the research subject constitute other materials of this study.

As to the determination of sample size, the study employed the "Unclustered Single-Stage Simple Random Sampling Method", which is the most preferred method in consumption studies. Questionnaire surveys were conducted to 490 household heads. Ratios of households

of each province to the total number of households were taken into account in the distribution of the calculated sample size to the provinces.

In this study, social and economic factors affecting the life satisfaction of household heads living in the urban centres of Antalya, Isparta and Burdur were analyzed using the Logit model. Dependent variable in the Logit model is discrete and the estimated probability values vary between 0 and 1. Another method that may be employed for this study is the Probit model. The basic discrepancy between the Logit and Probit models stems from the difference in assumptions regarding the probability distributions of the models. Though, no significant difference exists between the results obtained through these models (Green, 2002). On the other hand, the use of Logit model was preferred in this study as it is accepted that independent variables explain dependent variable better in the Logit model (Amemiya, 1983). The Logit model that is based on cumulative logistic probability function is expressed as follows (Gujarati, 2001):

$$P_i = E(Y = 1|X_i) = \alpha + \beta X_i$$

$$P_i = E(Y_i = 1|X_i) = \frac{1}{1 + e^{-(\alpha + \beta X_i)}}$$

$$= \frac{1}{1 + e^{-Z_i}}$$

[1]

In the equation, $Z_i = \alpha + \beta X_i$

where;

α : constant,

β : parameters to be estimated for each explanatory variable,

X_i : ith independent variable.

Equation [1] is named as the logistic distribution function and P_i denotes the probability of occurrence of the relevant incident. It becomes either zero or one as the result of the binary selection in the form of Yes/No. Z denotes the explanatory variables vector included in the model, whereas α and β denote the model parameters to be estimated.

When the equation above is rearranged and natural logarithm of both sides of the equation is taken, the following equation is derived:

$$L_i = Ln\left[\frac{P_i}{(1-P_i)}\right] = Z_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots + \beta_n X_n + \varepsilon$$

[2]

Dependent variable in this regression model (Z_i) expresses the natural logarithmic value of the ratio of choosing a certain option to choosing none. In other words, coefficients obtained from the Logit model expresses the probability of preferring an incident to not preferring it. "ε" was added to the equation as the error term of the model.

As the dependent variable in this study, household heads who are satisfied with their lives as a whole are accepted as 1 and household heads that are included in other options than being satisfied are accepted as 0. In the determination of probabilities of household heads to be and not to be satisfied with their lives, demographic variables as well as explanatory variables regarding the current perception of household heads were included in the model.

Demographic variables were included in the model as dummy variables. "I" variable represents the income group the household head belongs to, whereas "PR" and "EL" variables represent the province and educational level of the household head. Moreover, "HWS" variable represent the satisfaction felt by the household head for the housewife status of his spouse and "JS" variable represents the general job satisfaction level of the household head. Similarly, "HS" variable represents the satisfaction of the household head for his health status while "MS" variable represents the satisfaction level of the household head for his marriage.

Factors affecting the life satisfaction of household heads living in urban areas are analyzed employing the Logit model. Here, the model in equation 2 is reexpressed according to the said explanatory variables.

$$YM_i = \beta + \alpha_1 IL1 + \alpha_2 IL2 + \alpha_3 ED1 + \alpha_4 ED2 + \alpha_5 G1 + \alpha_6 G2 + \alpha_7 EM +$$
$$\alpha_8 SM + \alpha_9 IM + \alpha_{10} EVM + e_i$$

[3]

Codes regarding dependent and independent variables used in the Logit analysis are provided in Table 1. Logit model was estimated in Eviews 5.0 software employing the Maximum Likelihood Method. One of the most significant advantages of using this method is that the estimated parameters are consistent and efficient (Pindyck and Rubinfeld, 1991).

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Table 1. Variables Used in the Logit Model and Their Definitions

Dependent Variable	
LSi	1 if the household head is generally satisfied with his life, otherwise=0
Independent Variables	
PR1	1 if the household head resides in the urban centre of Burdur, otherwise=0
PR2	1 if the household head resides in the urban centre of Isparta, otherwise=0
PR3	1 if the household head resides in the urban centre of Antalya, otherwise=0 (reference class)
EL1	1 if the household head has an education level of primary education or lower, otherwise=0
$EL2$	1 if the household head has an education level of high school or equivalent, otherwise=0
EL3	1 if the household head has an education level of college or higher, otherwise=0 (reference class)
I_1	1 if the household head has a total income lower than TL1250, otherwise=0
I_2	1 if the household head has a total income between TL1250 and TL2500, otherwise=0
I3	1 if the household head has a total income higher than TL2500, otherwise=0 (reference class)
HWS	1 if the spouse is housewife, otherwise=0
HS	1 if the household head is generally satisfied with his health status, otherwise=0
JS	1 if the household head is generally satisfied with his job, otherwise=0
MS	1 if the household head is generally satisfied with his marriage, otherwise=0

3. DESCRIPTIVE STATISTICS

Descriptive statistics regarding the data compiled from 490 household heads used in the analyses are provided. It demonstrates that 16% of household heads reside in Burdur, 18% in Isparta and 66% in Antalya. 39% of the household heads who participated in the research were found to have an educational level of college or higher, whereas 38% have an educational level of high school or equivalent and 23% have an educational level lower than high school or equivalent. 21% of household heads are included in the lowest income group and 53% are included in the highest income group. While the spouses of 47% of the household heads in the research region are housewives, those who stated that their spouses were not housewife were 53%.

A great majority (72%) of the household heads stated that they were generally satisfied with their lives, whereas those who stated that they were dissatisfied were found to be 28%. Furthermore, 58% of the household heads in the research region stated that they were generally satisfied with their health status and 42% stated that they were generally dissatisfied with their current jobs. A great majority of the household heads who participated in the research stated that they were satisfied with their marriage (78%), whereas those who stated their dissatisfaction with their marriage were found to be 22%.

4. MODEL ESTIMATION RESULTS

The estimated model has 78% accurate estimation of the opinions of household heads living in urban areas. Additionally, the Nagelkerke R Square value, which indicates the explanatory power of the model, was found to be 0.52. The Logit model generally defined in Equation [3] was estimated employing the variables summarized in Table 1 and the estimation results and whether the parameters are statistically significant are presented in Table 2.

Table 2: Model Estimation Results

Variables	Coefficients	Z-Value	Level of Significance
C	-0.192	-0.518	0.6042
PR1	-0.733	-2.125	0.0336
PR2	-0.541	-1.659	0.993
EL1	-0.465	-1.350	0.1769

EL2	-0.617	-2.032	0.0421
I1	-0.938	-2.369	0.0178
I2	-0.552	-1.650	0.0989
HWS	0.482	1.685	0.0920
HS	1.031	4.025	0.0001
JS	0.804	2.818	0.0048
MS	2.319	7.917	0.0000
Nagelkerke R-Square	0.52		
Model Accurate Estimation Ratio	0.73		

According to the analysis results, all variables included in the model have the anticipated signs. In addition, all of the variables excluding EL1 and ISP were found to be statistically significant at 10% level of significance.

According to the model estimation results, the household heads living in a larger city were found to be happier than those living in a relatively smaller city, in other words, it was found that the household heads living in Antalya are more likely to be satisfied with their lives than those living in Isparta and Burdur.

According to research results, it is notable that the levels of life satisfaction of household heads decrease as their educational levels increase. The parameter related to the ED1 variable, which includes the household heads possessing the lowest educational level, was calculated as -0.46, which suggests that the household heads with low educational levels are more satisfied with their lives compared to household heads with higher educational levels. However, ED1 variable is not statistically significant.

Another variable included in the model is income variable. Similarly, parameters regarding income variables were found to be negative and statistically significant. It was found that the household heads with higher levels of income were more satisfied with their lives compared to those with lower levels of income, in other words, there exists a linear relationship between the income level and life satisfaction of household heads.

Parameters regarding housewife (HWS), job satisfaction (JS), health satisfaction (HS) and marriage satisfaction (MS) were found to be positive and statistically significant. In other words, it was found that those who were generally more satisfied with the housewife status of their wives, current job, health status and marriage were more satisfied with their lives.

5. CONCLUSION

This study analyzes the life satisfaction levels of household heads through the use of questionnaire survey data compiled from household heads living in urban areas. To that end, Logit model is estimated. It was found that life satisfaction decreases as the city in which the household head lives gets larger and similarly, the probability of household heads to be satisfied with their lives decreases as the level of education increases. Moreover, it was found that the household heads with higher levels of income were more satisfied with their lives than those with lower levels of income. Similarly, it was found that the household heads with housewife spouses, health status satisfaction, job satisfaction and marriage satisfaction were likely to be more satisfied with their lives compared to those who do not have such specific satisfactions.

REFERENCES

Amemiya, T., 1983. Advanced Econometrics. Cambridge, MA Harvard University.

Chow, H.P.H., 2005. Life Satisfaction Among Universıty Students in a Canadian Prairie City: a Multivariate Analysis, Social Indicators Research, 70, ss. 139- 150.

Cetin, M., Ebrinç, S., Başoğlu, C., Semiz, Ü.B., Çobanoğlu, N., Can, S. & Karaduman, F. 2003. Acemi Erlerin Yaşam Koşullarından Memnuniyetini Belirleyen Faktörlerin İncelenmesi, Türk Psikiyatri Dergisi, 14(2), ss. 125-133.

Dikmen, A.A., 1995. İş Doyumu ve Yaşam Doyumu İlişkisi. Ankara Üniversitesi SBF Dergisi, Cilt:50, No:3-4, Haziran-Aralık.

Dockery, A.M., 2003. Happiness, Life Satisfaction and the Role of Work: Evidence From two Australian Surveys. Paper Presentend to the 5 th Part to Full Employment Conference on Unemployment, University of Newcastle, 10-12 December.

Gilman, R. & Huebner, E. S. 2000. Review of Life Satisfaction Measures for Adolescents, Behaviour Change, Vol. 17, No. 3, ss.178-183.

Greene, W., 2002. Econometric Analysis, Macmillan,New York.

Gujarati, D., 2001. Temel Ekonometri, Literatür Yayınları, İstanbul

Guler K.B. ve Emeç, H. 2006. Yaşam Memnuniyeti Ve Akademik Başarıda İyimserlik Etkisi. D.E.Ü.İ.İ.B.F. Dergisi, Cilt:21 Sayı:2, ss:129-149.

Keser, A., 2005. İş Doyumu ve Yaşam Doyumu İlişkisi: Otomotiv Sektöründe Bir Uygulama. Çalışma ve Toplum, 4, ss.77-96.

Özdevecioğlu, M. ve Aktas, A., 2007. Kariyer Bağlılığı, Mesleki Bağlılık ve Örgütsel Bağlılığın Yaşam Tatmini Üzerindeki Etkisi: İş-Aile Çatışmasının Rolü. Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, Sayı: 28, Ocak-Haziran, ss.1-20.

Pindyck, R. S., ve Rubınfeld, D., 1991. Econometric Models and Economic Forecasts. Mc Graw-Hill, Inc, New York.

Rode, J., 2004. Job Satisfaction and Life Satisfaction Revisited: A Longitudinal Test of an Integrated Model. Human Relations, Volume 57(9), ss. 1205-1230.