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ECONOMIC RATIONALS AFFECTING INDIVIDUAL DEMANDS FOR LOCAL PUBLIC GOODS: SOCIO-ECONOMIC AND SOCIO-DEMOGRAPHIC CHARACTERISTICS*

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Abstract

The role of the local governments in the provision of public services to cities, districts and villages is vital since they are the first point of interaction of citizens, as pointed out by the subsidiarity. Due to these positions that directly affect and directly reach citizens, they are not only evaluated as providers of goods and services, but are also considered as institutions that evaluate the social perceptions of citizens. Citizens' perceptions about the delivery of goods and services are important in terms of determining the quantity and quality of these goods and services. Based on the fundamental utilitarian understanding that individuals will want to consume more than the goods they are satisfied with, or less to consume goods that are not satisfied, the subject of this study is an individual satisfaction-based goods-service demand analysis. The aim of this paper is to reveal the socio-demographic and socio-economic profiles of satisfaction for local public goods and services in terms of citizen satisfaction in Turkey. In this paper, multinomial logistic regression and chi-square test are employed. According to the findings, satisfaction level of municipality service in Turkey increases when overall life satisfaction, income level satisfaction, expectations from future and living in cities are increases. Moreover, females and singles are more likely dissatisfied with overall local public services. Also, education and satisfaction from municipal services have an inverse relationship; which shows that as the level of education increases, dissatisfaction increases.

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YEREL KAMUSAL MALLARA YÖNELİK BİREYSEL TALEPLERİ ETKİLEYEN EKONOMİK RASYOLAR: SOSYO-EKONOMİK VE SOSYO-DEMOGRAFİK ÖZELLİKLER

Öz

Yerel yönetimlerin şehirlere, bölgelere ve köylere kamu hizmetlerinin sağlanmasındaki rolü, sübsidarity kavramının işaret ettiği üzere vatandaşların ilk etkileşim noktası oldukları için hayati önem taşımaktadır. Vatandaşları doğrudan etkileyen ve doğrudan ulaşan bu pozisyonlar nedeniyle, sadece mal ve hizmet sağlayıcıları olarak değerlendirilmemekle kalmaz, aynı zamanda vatandaşların sosyal algılarını değerlendiren kurumlar olarak da değerlendirilirler. Vatandaşların mal ve hizmet sunumu hakkındaki algıları, bu mal ve hizmetlerin niceliğini ve kalitesini belirlemek açısından önemlidir. Bireylerin memnun oldukları mallardan daha fazlasını ya da memnun olmayan malları tüketmek isteyecekleri temel faydacı anlayışa dayanarak, bu çalışmanın konusu bireysel memnuniyet temelli bir mal-hizmet talep analizidir. Bu çalışmanın amacı ise Türkiye'de vatandaş memnuniyeti açısından yerel kamusal mal ve hizmetlerinden memnuniyetin sosyodemografik ve sosyo-ekonomik profillerini ortaya koymaktır. Bu sebeple, multinominal lojistik regresyon ve ki-kare testi kullanılmıştır. Bulgulara göre, genel yaşam memnuniyeti, gelir düzeyi memnuniyeti ve gelecekte beklenenleri yüksek olan kişiler ile şehirlerde yaşayan bireylerin Türkiye'deki belediye hizmetlerinden memnuniyeti yüksektir. Ayrıca kadınlar erkeklere göre, bekarlarda evli bireylere göre yerel kamusal mal ve hizmetlerinden daha az memnuniyet sergilemektedirler. Ayrıca belediye hizmetlerinden memnuniyet ile eğitim arasında da ters bir ilişki görülmüştür; ki bu eğitim seviyesi yükseldikçe memnuniyetsizliğin arttığını göstermektedir.

Anahtar Kelimeler: *Yaşam Memnuniyeti, Yerel Yönetimler, Belediyeler, Yerel Kamusal Mallar, Tercih Açıklatma*

1. INTRODUCTION

Local governments are public legal entities that structure a significant and indispensable element of public administrations in all countries. Yet, in their simplest form, they are intermediaries between citizens and governments in the delivery of public goods and services. Local administrations can either procure the public goods and services offered by the central government to citizens, but also produce and deliver goods and services to the citizens in cooperation with central governments. Additionally, in this mediation activity, the local government can actually produce goods and services by itself by the funds or the grants it receives from the central government or by the revenues it has generated based on the power of the political decision-making mechanism to collect it.

The questions of what criteria these goods and services are going to be produced and delivered, what extent these goods and services is going to meet the needs of the citizens and what the performance relationship is between the resources used for the goods and services offered and the quantities produced have always been some of the fundamental questions of public finance. For a long time, it was thought that the best and perhaps the only way of answering these questions was to examine policy makers and their decisions. Yet, researches over the past few decades have shown that classical economists were right theoretically if the hedonic adaptation of individuals are ignored. Based on the idea that the preferences and demands of individuals are affected by psychological elements, this study seeks to investigate socio-demographic and socio-economic characteristics affect citizens' preferences and demands for local public goods and services in Turkey via using multinomial logit regression analysis and chi-square test.

2. BACKGROUND AND THEORY

One of the most basic duties of the public is the provision of goods and services that will meet the demands and needs of its citizens, which is the reason for its existence. However, the structural characteristics of these goods and services, such as being subject to common consumption, non-excludability and non-rivalry create a deviation in the behavior of rational and self-interested individuals who participate in financing. In this context, individuals refrain from explaining their preferences for public goods by hoping that other individuals who explain their preferences will bear the cost of these goods (Samuelson, 1954: 388-389; Clarke, 1971: 17, 19). Failure in correct revelation of preferences or demands creates an additional burden for individuals who are under the obligation to bear the cost by making a right and honest preference statement, and this results in a delivery performance of goods below the optimal

level (Stiglitz, 2000: 130-131; Trogen, 2005: 198-199). Therefore, it can be said that the emergence of individual preferences and demands plays a vital role in the correct functioning of the whole process, from effective resource allocation to the delivery of public goods and services in desired quantities.

Until the late 1970s, many economists adopted the opinion of Due and Friedlaender (1973: 158) that "*the main problem with public goods is that there is no way to determine preferences*". As the theories of "*revealed preferences*" and "*stated preferences*" claim that it can be determined how and in what way individuals show their attitude towards the goods either in public or in private sector, intellectual changes have started to be made to determine individual preferences. Nowadays, there are many methods or mechanisms in the literature that aim to enlighten personal preferences. One of these methods is the methodology of life satisfaction that employs the stated preferences theory.

Life satisfaction approach identifies demand characteristics by revealing individual preferences for public goods and services through satisfaction surveys. It is assumed that individuals do not behave strategically since neither the real purpose of asking "*how much you are satisfied with the specific goods or services*" are told nor they are not asked directly or indirectly either to pay for the public goods and services offered to them or to declare their willingness to pay for them. The idea of not adopting any strategic behavior means a sort of strong pre-acceptance that the life satisfaction approach can be used to determine preferences and subsequently the demand (Frey et al, 2004; Van Praag and Ferre-i-Carbonell, 2008; Graham and Lora, 2010).

Citizen surveys have been employed now by an increasing number of city administrators or other government officials all around the world for several purposes such as measuring the outcomes of their service provision efforts (Miller and Miller, 1991; Stipak, 1979; Van Ryzin, 2004), understanding preferences and demands (Duffy, 2000; Welsch, 2003; Li, 2008; Schlapfer, 2015; Gumus-Ozuyar, 2017), obtaining citizen feedbacks about public services (Miller and Miller, 1991; Anderson, 1998), legalizing their management decisions or performances through satisfaction and expectations (Oliver, 1980; James, 2009; Layard and O'Donnell, 2015; Harris et al., 2016) and getting an idea on social trust to the government (Levi, 1998; Van de Walle and Bouckaert, 2003; Morgenson, 2012; Martinez et al., 2015) etc. Also institutions structured on service satisfaction approach based on citizen surveys are formed in many countries. UK's Citizen's Charter (1991), France's Charte des Services Public (1992), Belgium's Charter of the user of Public Services (1993) are the intermediaries to set standards

of service delivery between government and citizen (Van de Walle, 2018: 228).

In addition, countries determine their own public policies by using the method of life satisfaction directly. The European Union also uses citizens' service satisfaction and expectations in order to understand the demands and needs of citizens correctly, to meet the changing demand for goods and services, to distribute resources according to these elements and to restructure the trust in governments (EUPAN, 2008: 8). European Social Survey and European Barometer are some of the citizens surveys employed to conduct satisfaction analyses. Dayton, Ohio has used citizen surveys annually since 1974 (Stipak, 1980: 523). Government Accounting Standard Board (1994), International City/Country Management Association (2002) and National Academy of Public Administration (1999) in the United States have used in order to measure their service delivery performances and re-design the processes.

3. DATA

The source of data used in this study is 2004-2012 Life Satisfaction Survey of Turkish Statistical Institute. The conducted survey comprises questions of happiness, satisfaction and expectation levels of individuals as well as of individuals' socio-demographic and socio-economic characteristics. General structure of the satisfaction questions are given in Appendix Table A1. Appendix Table 2 and Appendix Table A3 present the sample characteristics and the summary statistics respectively.

Apart from the missing data, surveys of 52,792 (23,739 female and 29,053 male) people are used to perform the 8-year analysis. In detail, female population is greater than male population each year and an increase in attendees with higher education can be seen. Although participants are mostly working in the private sector, unemployment level has not been changed substantially. Since sample size and subjects are selected very carefully but randomly to reflect all citizens of Turkey as well as public thought, these details become crucial to monitor changes in society's structure.

In used data, life satisfaction and income satisfaction has been scaled from 1 (very satisfied) to 5 (very dissatisfied), but since only satisfaction and dissatisfaction answers lure our attention, extreme answers are eliminated. Additionally, even though satisfaction levels of local public goods and services differ from 1 to 4 as 1 (satisfied), 2 (dissatisfied), 3 (no idea) and 4 (municipality does not have such a service), we only focus on the affection relation between satisfied and dissatisfied as it can be seen in the tables. Answers to the questions on expectations (definition can be found at Appendix) are coded between 1 (very hopeful) and 4 (very hopeless)

and codes of socio-demographic or socio-economic replies differ based on what the question consists of.

4. METHODOLOGY

As indicated in introduction, in this paper, the socio-demographic factors that affect the citizens' preferences and demands for local public goods are investigated. For this purpose, refuse and waste services, city water services, public transportation services of Turkish municipalities are chosen to conduct the analyses.

Seven hypotheses are tested;

H₀₁ = Turkish urbanities are more likely satisfied with public services produced by Turkish municipalities

H₀₂ = Females are more dissatisfied with Turkish municipality services than males

H₀₃ = Marital status does affect public service satisfaction significantly

H₀₄ = People happy with their life mostly happy with municipality services

H₀₅ = People who expects better services in future (hopeful people) are more likely the people who satisfy with local public services

H₀₆ = Unemployed citizens do not satisfy with municipality services

H₀₇ = Satisfaction of income level regardless income level's itself has a positive relation with municipal services

In order to find answers for the hypotheses, multinomial logit regression and chi-square test will be applied. Multinomial logistic regression test is conducted since categorical dependent variables and multiple independent variables are employed and since it is desired to estimate the probabilities of different findings of a class on the dependent variable depending on the set of independent variables.

5. MODEL

In the literature (Oliver, 1980; Welsch, 2003; Van Ryzin, 2004; Roch and Poister, 2006; James, 2009; Levinson, 2009) satisfaction functions include all individual and environmental elements that may affect the goods and services. Based on this point, the general model has been established as follows.

Local Public Goods-Services' Satisfaction (LPGS) = $\alpha + \gamma \ln G_i + X_i' \beta + \varepsilon_i$

$LPGS_i$ = i's satisfaction with the delivery of local public goods-services

$\ln G_i$ = Derivative form of income to find marginal effects

X_i' = Socio-demographic, socio-economic characteristics, expectations (including hidden effects) of i

α, γ = Coefficients

ε_i = Error term

Satisfaction levels of the local services are taken as dependent variable, and reference category is chosen as the first category, satisfied. Individuals who responded as "no idea" and "municipality does not have such a service" are excluded from the analysis¹.

6. FINDINGS

Results can be seen in Table 1.

Table 1: Satisfaction analysis of local public goods and services

	Refuse and Waste Services (dissatisfaction)			Mains Water Services (dissatisfaction)			Public Transportation Services (dissatisfaction)		
	B	Wald	χ^2	B	Wald	χ^2	B	Wald	χ^2
Intercept	-0.98** *	111,75	199,47	-0.98** *	114,45	195,95	-0.15** *	190,88	435,50
Year	-0.04** *	48,14	154,39	-0.05** *	86,04	189,07	-0.02** *	8,78	270,17
Income	-0.04	0.13	51,35	0.001	0.001	4,54	0.06** *	22,82	100,78
Urbanite	-0.34** *	78,68	537,89	-0.20** *	25,56	569,21	0.05	1,06	1847
Female	0.15	18,55	24,21	0.17** *	25,50	26,44	0.09	6,34	20,74
Single	0.49**	35,28	58,08	0.45**	30,38	49,73	0.60**	47,24	99,86

¹ In this regard, these individuals are considered as the lost data, and the amount of the lost data is 5387 people. When the year-by-year distributions of the loss data groups are analyzed; It is understood that the variables do not show the normal distribution in any of the analysis years. Normality tests of the lost data are carried out with the Shapiro-Wilk W test. It has been understood that the distributions of the data used for analysis after the missing data are removed show a similar distribution with the lost data. For this reason, it can be said that excluding lost data from analysis does not jeopardize the health of the analysis. Fitstat statistics are examined. There are two diagnostic tests that should be examined in the logit and probit regression models. These are multicollinearity and model specification tests. Since there is no model specification error in logit and probit regression, it is thought that regression analysis can be carried out safely since the heteroscedasticity cannot be searched.

	*			*			*		
Married	0.40** *	29,75	70,79	0.42** *	33,79	81,33	0.27** *	11,61	25,85
Divorced	0.02	0.03	3,50	0.01	0.002	9,21	0.09	0.40	1,12
Separate	0.26	2,23	3,46	0.35**	4,08	4,27	0.04	0.04	0.71
Education	0.13** *	100,5 8	123,3 6	0.12** *	93,63	105,4 9	0.18** *	194,9 1	195,9 6
Unemployed	- 0.14** *	15,76	27,25	- 0.16** *	19,12	25,25	- 0.20** *	26,58	49,34
Happiness from Income	- 0.21** *	45,61	48,22	- 0.16** *	26,99	29,04	- 0.39** *	120,8 2	134,6 7
Satisfaction in Life	- 0.27** *	42,71	51,76	- 0.30** *	54,58	64,62	- 0.28** *	40,54	60,96
Expectations	- 0.35** *	91,79	94,08	- 0.38** *	115,7 2	121,7 3	- 0.40** *	106,6 3	110,6 4

Refuse and waste services satisfaction moderately rises each year compared to the dissatisfaction. Similarly, dissatisfied citizens who live in cities are 0,711 times more than satisfied urbanites. In other words, people appreciate municipalities' refuse and waste services in urban societies more than people who live in country side.

Moreover, according to the analysis females are more dissatisfied on these services than males. If marital status of sample society is taken into account, it is seen that dissatisfaction level of refuse and waste services is higher than the satisfaction level. Yet, the most dissatisfied unit is found to be singles whereas divorced subjects are relatively satisfied in this group.

Unsurprisingly, education and satisfaction are inversely correlated. Accordingly an increase in education causes a decrease in satisfaction. Based on the refuse and waste services data, it has been figured out that the service dissatisfied people have 1,136 times greater educational level than the service satisfied people. On the other hand, individuals who are satisfied in life are more likely to be and significantly dissatisfied with municipalities' such services; and who are hopeful from the future on service provisions are mostly satisfied people.

If the situation is evaluated in terms of income, no major changes due to income level have been observed. But, when it comes to the satisfaction on income, then it can be observed that people who are satisfied with their income are less dissatisfied with municipality services. Lastly socio-economic characteristics and unemployment reflect that unemployed people are generally happy or satisfied with these services.

For mains water, when income level and time are considered, no significant changes in correlation between satisfaction and dissatisfaction have been detected. Nevertheless, city water services' satisfaction level exhibits very small changes for each year. As another sociodemographic factor, living in urban or country side significantly and directly affects satisfaction from city water services and as it expected people who live in cities are more satisfied with mentioned service. Also, satisfied urbanites are greater than dissatisfied urbanites.

Similar to refuse and waste services, females, singles and married subjects' dissatisfactions are higher than their satisfactions. Although divorced people seem relatively neutral on mains water services, their decisions are not significant at all. Apart from these, it has been figured out that higher education level is directly proportional to dissatisfaction level.

Life satisfaction level positively affects people's thoughts on city water service. In other words, people who are happier in their life are more likely to be satisfied with city water services. Also, hopeful subjects are generally happy and satisfied with these services. When income level influences satisfaction and dissatisfaction of this kind of services indifferently, citizens satisfied with their income level seem satisfied with city water services.

Since there are no big differences observed between low income levels and high income levels in terms of provided services, such a similar pattern in unemployment period is expected when their low income are taken into consideration at the time. However, unemployment level does actually affect the satisfaction level from mains water services. Unemployed people are less dissatisfied with mains water services.

Satisfaction of municipalities' public transportation services slightly differentiates year by year, so it will not be assessed. Dissatisfied subjects who live in cities are 1,051 times more than urban satisfied citizens. Scilicet, urbanites are more dissatisfied than those who are satisfied. As it is mentioned in the other two services, dissatisfied female attendees increase, and female beneficiaries are more dissatisfied with public transportation services than male beneficiaries. However, for public transportation service, being female is neither a strong nor a significant factor.

Being single or being married becomes important in terms of public transportation service satisfaction when the others are not remarkably important. Single and married citizens' dissatisfaction levels of public transportation services are higher than their satisfaction levels. In addition, education level still has an inverse relationship with the satisfaction level.

Even though income is not an important indicator of reflecting the link between

satisfaction and dissatisfaction levels of public transportation services of local governments, satisfaction of income level actually is; and it means that income satisfaction positively affects public transportation satisfaction.

7. RESULT AND DISCUSSION

For the analyzed services, satisfaction level rises each year very moderately compared to dissatisfaction level, yet this alteration might be ignored since the probabilities are really close to each other. Also, in both three analyses urbanites generally seem more appreciative of the services of municipalities than people living in country-sides. However, when it comes to public transportation, one of the bleeding wound becomes evident. In recent days, many urbanites complain about public transportation quality and quantity especially in big cities. And obviously, this survey verifies this information by reflecting "urbanites' dissatisfactions increase compared to their satisfactions". Ladies seem more dissatisfied with stated services. This information is enormously important for Turkish municipalities since in traditional role of Turkish life women control the needs of the house and form everything related to it. So, female dissatisfaction of the services is not only a single person's concern but a whole family's for all reasons. Furthermore, very surprisingly single attendees are mostly dissatisfied with the services. Since the sample reflects Turkey in general, it becomes even more interesting. Sociologically, Turks believe that singles are generally happy or satisfied even with little things. There is a quote saying that "There is no sovereignty like bachelorhood". It has been figured out that higher education level is directly proportional to dissatisfaction level for almost every given service. So, if one district has more intellectual residents than the other, governors must better be more careful since satisfaction can fluctuate very easily and not serving appropriately may cause a risk on re-election. It is also important in terms of performance criterion. If residents of these districts are generally intellectual, administrators may re-design their objectives because basic services such as waste services may not satisfy residents as a free-theater event. 2014 and 2017 Local Elections of Turkey were very instructive in this respect. Because districts where residents are more educated or intellectual gave their votes to the political parties who place a great emphasis on green field or at least show their attitudes towards such a tendency. This cannot be a solid fact to explain or support our main idea, yet can be a proper example for it.

Another sociologic element is life satisfaction. This type of satisfaction level is found to have a positive relationship with satisfaction of local public services. In other words, people who are happy and satisfied with their life are less likely dissatisfied with municipality services.

Besides, people who are hopeful for getting better public services will more likely appreciate municipality public services.

As one of the socio-economic characteristics chosen for this study, income level does not cause a significant change between satisfaction and dissatisfaction of the stated services. However, income satisfaction level is a very important gauge for this alteration. Scilicet, people who are happy with their income are more likely to be happier and satisfied with local public services. Lastly socio-economic characteristic, unemployment, reflects that unemployed people are generally happy or less dissatisfied with the discussed services.

So, from the constituted hypotheses H_{02} , H_{04} , H_{05} , H_{07} are verified while H_{06} is falsified without a need of any extra comment. H_{01} can also be confirmed except public transformation services and H_{03} may be accepted if "*live separately*" and "*divorced*" options are removed from marital status group. In the Public Financial Management and Control Law No. 5018 of Turkey, accepted in 2003 and become effective as of 2005, public institutions are forced to form strategic programs. According to the Law article 9 quotes that "*Public institutions form their strategic plans with participatory methods in order to measure, to monitor and to evaluate development plans and programs, structured based on the fundamental principles...*". Also, the Law mentions that all strategic plans and programs must be structured for the future within the frame of objective goals, gaugeable performance and achievable targets.

Whereas, the Law requires achievable, gaugeable targets, goals and performances we suggest Turkish municipalities to re-set their strategic performance goals, performance target etc. by employing life satisfaction survey as an indicator since these surveys reflects citizens satisfaction and dissatisfaction levels from a certain public goods or services as well as expectations from the services. If municipalities keep insists to disregard people's declarations, they may not be able to meet the expectations and needs of their citizens and they may confront with not re-electing and other consequences such as unexpected social movements like Istanbul protests shaken the total political system.

REFERENCES

- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1(1), 5-17.
- Clarke, E. H. (1971). Multipart pricing of public goods. *Public Choice*, 11(1), 17-33.
- Due, J.F. Friedlaender A.F. (1973). *Government Finance: Economics of the Public*

Sector, UK: Irwin Inc.

Duffy, B. (2000). Satisfaction and Expectations: Attitudes to public services in deprived areas, London School of Economics Centre for Analysis of Social Exclusion (CASE Paper No. 45).

European Public Administration Network (EUPAN). (2008). *Customer Satisfaction Management*.http://www.eupan.eu/files/repository/20101215131727_EU_Primer_English_FINAL_LR.pdf

Frey, B. S., Luechinger, S., & A. Stutzer (2004). Valuing public goods: the life satisfaction approach, Institute Center for Economic Studies Munich (Working paper 1158).

Graham, C. & Lora E. (Eds) (2010). Paradox and Perception: Measuring quality of life in Latin America. Washington DC: Brooking Institution Press.

Gümüş-Özuyar (2017). Türkiye’de Adalet Hizmetleri Talebinin Belirleyicileri: Yaşam Memnuniyeti Yöntemi İle Bir Uygulama 2004-2012. Yayımlanmamış Doktora Tezi. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Harris, L.C., Fisk, R.P., & Sysalova, H. (2016). Exposing Pinocchio customers: investigating exaggerated service stories. *Journal of Service Management*, 27(2), 63-90.

James, O. (2009). Evaluating the Expectations Disconfirmation and Expectations Anchoring Approaches to Citizen Satisfaction with Local Public Services. *Journal of Public Administration Research and Theory*, 19(1), 107-123.

Layard, R., & O’Donnell, G. (2015). How to make policy when happiness is the goal. *World Happiness Report* (Eds. J. Helliwell, R. Layard & J. Sachs). New York: UN, 77-81.

Levi, M. (1998). A State of Trust. *Trust and Governance* (Eds. M. Levi & V. Braithwaite), New York: Russell Sage Foundation, 77-101.

Levinson, A. (2009). Valuing Public Goods Using Happiness Data: The Case of Air Quality. *The National Bureau of Economic Research* (Working Paper No: 15156). Cambridge

Li, H. (2008). Satisfaction with Local “Public Goods” and Services: The Effects of Household Income and Privatization in Southern California. Yayımlanmamış

- Doktora Tezi. Faculty of the Graduate School University of South California, USA.
- Martinez, L., Short, J., & Otiz, M. (2015). Citizen satisfaction with public goods and government services in the global urban south: A case study of Cali, Colombia. *Habitat International*, 49(2), 84-91.
- Miller, T.I & Miller, M (1991). *Citizen Surveys: How to do them, How to use them, what they mean*, Washington DC: International City/Country Management Association.
- Morgenson, F.V. (2012). Expectations, Disconfirmation, and Citizen Satisfaction with the US Federal Government: Testing and Expanding the Model. *Journal of Public Administration Research and Theory*, 23(2), 289-305.
- Oliver, R. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Roch, C. H. & Poister, T. H. (2006). Citizens, Accountability, and Service Satisfaction. *Urban Affairs Review*, 41(3), 292-308.
- Samuelson, P. A. (1954). The Pure Theory of Public Expenditure. *The Review of Economics and Statistics*, 36(4), 387-389.
- Schläpfer, F. (2015). Stated preferences for public services: A classification and survey of approaches. *Journal of Economic Surveys*. Early view, DOI: 10.1111/joes.12140
- Stiglitz, J. (2000). *Economics of Public Sector*, New York: W. Norton & Company.
- Stipak, B. (1979). Citizen Satisfaction with Urban Services: Potential Misuse as a Performance Indicator. *Public Administration Review*, 39(1), 46-52.
- Stipak, B. (1980). Local Governments' Use of Citizen Surveys. *Public Administration Review*, 40(5), 521-525.
- Trogen, C.P. (2005). Public Goods Theory of Public Goods. *Handbook of Public Sector Economics* (Ed D. Robbins), Florida: Taylor & Francis Group, 169-232.
- Van de Walle, S. & Bouckaert, G. (2003). Public Service performance and Trust in Government: The Problem of Causality. *International Review of Administrative Sciences*, 8(9), 891-913.

- Van de Walle, S. (2018). Explaining Citizen Satisfaction and Dissatisfaction with Public Services. The Palgrave Handbook of Public Administration and Management in Europe (Eds. E. Ongaro & S. Van Thiel), London: Palgrave Macmillan, 227-24.
- Van Praag, B. M. S. & Ferrer-i-Carbonell A. (2008). Happiness Quantified: A Satisfaction Calculus Approach. Oxford: UK. Revised & Paperback edition: Oxford University Press
- Van Ryzin, G. (2004). The Measurement of Overall Citizen Satisfaction. Public Performance & Management Review, 27(3), 9-28.
- Welsch, H. (2003). Environment and Happiness: Valuation of air pollution in ten European countries. German Institute for Economic Research (Discussion Paper 356), Berlin.

APPENDIX

<i>Appendix A1</i>
Survey Questions for Key Variables
Satisfaction
How satisfied are you with the performance of your local authority's listed services?
Refuse and Waste Services
Mains Water Services
Public Transportation Services
Expectation
Thinking about the future public services delivery, how hopeful are you?
Very Hopeful
Hopeful
Hopeless
Very Hopeless

<i>Appendix A2</i>									
Total Numbers for Each Year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Individuals	5513	5748	5372	5425	5371	6266	5858	6351	6887
Female	2999	3090	2959	3005	2937	3482	3287	3460	3833
Male	2514	2658	2413	2420	2434	2784	2571	2891	3054
City	4552	4717	4361	4343	4358	5256	4962	5404	5821
Rural	961	1031	1011	1082	1013	1010	896	947	1066
Single	938	995	843	817	857	1035	870	988	982
Married	4132	4291	4125	4149	4050	4643	4439	4768	5227
Divorced	77	72	86	93	108	42	26	153	443
Spouse died	341	369	296	344	335	397	384	410	232
Live separately	25	21	22	22	21	149	139	32	0
Illiterate or not going to school	977	1070	976	959	838	1001	884	947	1019
Graduate from primary school	2373	2443	2234	2307	2171	2532	2348	2503	2545
Graduate from secondary school	589	609	655	581	667	772	713	810	859
Graduate from high or vocational school	1045	1083	984	1041	1060	1193	1161	1257	1392
Graduate from college or open-college(digital)	505	504	495	507	599	256	252	270	306
Graduate from university	24	39	28	30	36	459	439	497	641
Having a degree of master or doctorate	0	0	0	0	0	52	61	67	125
Unemployed	3633	3693	3428	3489	3389	3787	3556	3690	4024
Public Sector employee	439	427	420	392	416	441	423	420	557
Private Sector employee	1441	1628	1524	1542	1566	2038	1841	2213	2276
Total Local Public services	5513	5748	5372	5425	5371	6266	5858	6351	6887

Appendix A3					
Descriptive Statistics					
	N	Minimum	Maksimum	Mean	Std.Deviation
Year	52791	1	9	5.17	2.620
Income	52791	1	14	3.11	1.428
Urbanite	52791	0	1	0.83	0.376
Female	52791	0	1	0.55	0.497
Single	52791	0	1	0.16	0.364
Married	52791	0	1	0.75	0.430
Divorced	52791	0	1	0.02	0.143
Separate	52791	0	1	0.01	0.090
Education	52791	1	7	2.75	1.392
Unemployed	52791	0	1	0.62	0.486
Happy with income level	52791	0	6	0.45	0.557
Life Satisfaction	52791	0	1	0.84	0.371
Expectation	52791	0	1	0.70	0.460
Refuse and Waste Services	52791	1	4	1.27	0.526
Mains Water Services	52791	1	4	1.28	0.542
Public Transportation Services	52791	1	4	1.65	1.002