Bordeaux 2016 Abstract Submission

Title
Life satisfaction and diet: Evidence from the Russian Longitudinal Monitoring Survey

I want to submit an abstract for:
Conference Presentation

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Keywords
life satisfaction, diet, Russia

Research Question
Do people with better diet report higher levels of lifestyle satisfaction?

Methods
Following the theoretical model, we estimate the following econometric equation: \( S_{it} = \alpha_0 + \alpha_1 D_{it} + \alpha_4 O_{it} + \eta_{it} \), where \( S \) is an indicator of life satisfaction, \( D \) is diet; panel data; random effects model

Results
Preliminary results suggest that calories, fat and protein composition, and food diversity have positive and statistically significant effect on life satisfaction in Russia.

Abstract
Life satisfaction and diet: Evidence from the Russian Longitudinal Monitoring Survey
Sonya Huffman and Marian Rizov

Life satisfaction is the ultimate goal of life. Being able to understand life satisfaction and people’s quality of life is fundamental when assessing the progress of societies. There is now widespread acknowledgement that subjective wellbeing is an essential part of measuring quality of life alongside other social and economic dimensions. Better understanding the drivers of subjective well-being will assist in government decision making processes to improve the world’s wellbeing and sustainable development, including the allocation of resources and the design elements of politics. Life satisfaction research finds general patterns in the relationship between socioeconomic variables and satisfaction across countries and across time. Understanding what makes people
happy and why may help understand some of the fundamental questions in economics. The goal of this study is to improve our understanding of well-being in Russia, by examining the impacts of diet on life satisfaction. Do people with better diet report higher levels of lifestyle satisfaction? This study contributes to the existing literature on life satisfaction with providing empirical evidence on impacts of diet on life satisfaction and correcting for reverse causality by using 1995-2007 data from the Russian Longitudinal Monitoring Survey (RLMS).

We develop the following theoretical model of satisfaction production, after the Becker and Rayo (2008). We assume that life satisfaction is a commodity in the utility function as other goods are. The individual maximize utility, \( U = U(S, C; O) \), where \( S \) is life satisfaction and \( C \) is other commodity and fixed characteristics \( O \), such as age, gender, education and socioeconomic background. The individual cannot buy satisfaction in the marketplace. Therefore, we assume that \( S \) is not directly purchased but have to be produced by each individual according to a household production function, using market goods, time, and other inputs. The individual has the following production functions: \( S = S(D, L, O; \varepsilon) \), where food \( D \); leisure, \( L \); and \( \varepsilon \) are the unobservable individual characteristics that affect individual's life satisfaction, \( S \). The individual also has a budget constraint: \( PDD + PPC = W(T-L) + N \), where PD and PC denote the market prices of food \( D \), and the other good \( C \), respectively; \( W \) is the wage rate per unit of time, \( T \) is the fixed time endowment \( (T-L=work) \), and \( N \) is the non-labor income. To obtain the full income budget constrain \( F \), we define \( \pi S \) to be the average shadow price of producing \( S: \pi S = W(T-L) + N - PDD - PPC = F \). The shadow price \( \pi S \) depends on the prices of the goods inputs \( (PD \) and \( PC) \), the wage \( W \), and the productivity of household production functions that depend on the various individual characteristics, \( O \). Therefore, the production of satisfaction depends on personal and objective market characteristics. We assume that the individual maximizes the utility subject to budget constraint and satisfaction production function. The Hicks demand function for life satisfaction is: \( S = S(U, \pi S) = S(U, PD, PC, W, O) \). Following the theoretical model, we estimate the following econometric equation: \( S_{it} = \alpha_0 + \alpha_1 D + \alpha_4 O + \eta_{it} \), where \( S \) is an indicator of life satisfaction, \( D \) is diet (composition and diversity), \( O \) is a vector of exogenous explanatory variables, including age, age squared, education, married, children, bad health (an indicator of self-assessed health status), regions, service or manufacturing sector, employment regional characteristics (unemployment rate, inflation, GRP per capita, GRP growth), and is the disturbance term. To deal with the endogeneity and reverse causality issues, we propose to replace the endogenous variables with lags. In our study, diet is a choice variable. Therefore, we will use one-period lags of this variable. Lags of endogenous variables can offer consistent estimators of the coefficients of interest (Cameron and Trivedi, 2009). Using panel data for the years 1995-2007 from the RLMS allows for the correction of unobserved personality traits and correlated measurement errors. Hausman test indicated the model of choice; random effects model for panel data to control for time invariant variables. Life satisfaction is measured by IMSATISL variable in the RLMS. Each respondent is asked: How satisfied or unsatisfied are with your life? The answer is: Your life in general at present is: 1. Absolutely satisfied; 2. Mostly satisfied; 3. Yes and no; 4. Not very satisfied; 5. Absolutely not satisfied.

Preliminary results suggest that calories, fat and protein composition, and food diversity have positive and statistically significant effect on life satisfaction in Russia. In addition education, income, household size, and living in a region with high Gross Domestic Product per capita affect positively and statistically significantly life satisfaction indicator for the Russian citizens. Families having older children, individuals with health problems and individuals living in rural areas report having lower levels in life satisfaction in Russia. We found that the coefficients of these variables are negative and statistically significant when estimating their effects on life satisfaction in the country of Russia.

References:
Cameron C. and Trivedi, P. 2009. Microeconometrics Using Stata, 1st edition, Stata press, College station, TX.