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## Non-Technical Summary

The project “Socioeconomic and Psycho-Emotional Determinants of Health in Latvia” was started in January 2008 under the direction of Irina Mozhaeva (formerly Zujeva), principal investigator of the project. The research is based on data obtained in a population survey (further – Health Survey) that was implemented by means of the research grant. The survey was conducted from March 20 to April 11, 2008. It has covered residents of all regions of Latvia aged 15 to 74; in this research we use only adults, e.g. respondents aged 18-74. Data were collected by face-to-face interviews, information is available only for one household member. After omitting all observations with missing values for health and respondents below 18 a sample of 921 observations was obtained.

The questionnaire included one question on self-assessed status (it was used as a dependent variable in the research), demographic characteristics, some questions on psychosocial resources including control over life, life satisfaction with different life domains, one's expectations on future life (own, group's, in the country) and presence of serious psycho-emotional problems, and also some questions on lifestyle and attitude towards own health.

Association between the self-assessed health and socio-economic and psychosocial determinants is analyzed in the paper “Multidimensional Health Modeling: Association Between Socioeconomic and Psychosocial Factors and Health in Latvia”. Impact of lifestyle and attitude towards own health will be analyzed in detail in the next paper.

The paper “Multidimensional Health Modeling: Association Between Socioeconomic and Psychosocial Factors and Health in Latvia” proposes new approach for modeling health. This paper presents an advanced econometric model that was not used in the field of health economics before – multidimensional stereotype logit model. The model allows estimating association between dependent variable and factors in more than one dimension allowing for nonmonotonicity in effects of latent variables. Stereotype logit also allows indicating whether all categories of the dependent variable are distinguishable and which are not. In this paper a two-dimensional stereotype logit model is used to estimate association between self-assessed health of residents of Latvia and socioeconomic determinants and psychosocial factors.

As it was mentioned above, SAH is used as a dependent variable in this research. Due to budget restrictions it wasn't possible to use SF-36 or similar methodology to assess health and only one question on health status was asked in the Health Survey. At the same time in distinction from other researches that use one question for health assessment, in this research health categories offered for respondents differ from usually employed very poor to very good health scale.

It was proved that a standard health scale (very good, good, fair, poor, very poor) usually used in health surveys implies number of problems. Some studies that have used both SAH and more objective health measures (clinical health) proved that this scale of SAH implies heterogeneity bias. Another problem of the very good to very poor health scale is its nonstability. People often face difficulties in assessing their health in terms of good/fair or fair/poor health and are usually randomly picking between two categories.

In our research we use less subjective SAH scale which allows minimizing reporting bias and respondent's perception odds thus helping to provide more reliable results for self-assessed health status.

The two-dimensional stereotype logistic model presented in the paper suggests that concept of health is too complicated to measure impact of health determinants in a single dimension – some effects remain unrevealed or underestimated if one-dimensional models, e.g. ordered logit or probit model, are used. Moreover we observe nonmonotonicity in association between health and some latent variables which can be shown only when multidimensional effects of factors are analyzed.

The models developed in the paper propose that psychosocial factors may be of central interest when one analyzes determinants of health in Latvia. The association between self-assessed health and the three psychosocial factors analyzed – life satisfaction, perceived control over own life and optimism – is significant and particularly strong. Relationship between the former two factors and health differs for males and females.

The paper accentuates that tackling health inequalities in Latvia should involve tackling not only income, education, occupation or other 'classic' inequalities, but also inequalities in access to psychosocial resources. The paper provides new evidence about the importance of psychosocial factors in explaining individual differences in health and improving population health in Latvia.

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Principal Investigator