

SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

This report is submitted for approval by the STSM applicant to the STSM coordinator

Action number: Action IS1409

STSM title: Analysis of influence of working condition on the general state of health for the employees of age above 50, in the selected EU countries.

STSM start and end date: 8 April 2019 to 16 April 2019

Grantee name: Pavel Žiaran

PURPOSE OF THE STSM:

The objective of the STSM was to carry out a research work on the influence of labor conditions on the general state of health for the employees of age above 50, in the EU and the selected EU countries.

With the medical doctor and researcher, Dr. Noémia Loio, representing the Department of Occupational Medicine, University Hospital Center, Porto, Portugal, we have been cooperating since the meeting of ECI in Larnaca, Cyprus 2018 (COST Action IS 1409), focusing on the research concerning impact of labour conditions on health of older workers (above age of 50), especially in the gender perspective.

Objective of the research is to provide findings for the policy makers as well as to the corporation, with a declared interest in improvement the labour condition of the older workers. The research brings important finding, serving as a basis for the policy recommendation, including special focus on gender specific health risks. The research will bring findings on the risk of adverse labour condition on physical and mental health, in gender perspective.

DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS

We use the data from the Survey of Health, Ageing and Retirement in Europe database (Share), which is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of more than 120,000 individuals aged 50+.

The Share database covers 27 European countries and Israel (Share-project, 2018). We focused on the data at the overall European level, with the partial interest concerning the following countries: Portugal and Czech Republic.

The data come from the data collection, wave 6 (Börsch-Supan, 2018) from the questionnaire modules:

- 'Employment and pension', including data on employment status, individual income sources (public benefits, pensions), special focus is on the variables concerning data on the perceived quality of labour conditions.
- 'Gvt Health', including data on self-rated health, diseases, number of chronic disease, bmi indexes, indexes of the quality of life, depression scale, etc.
- 'Physical Health', including data on the selected diseases: hear attack, hypertension, stroke, wide of

scope of cancer diseases.

We use a wide range of statistical techniques, corresponding to the nature of data, non-parametric testing, correlations and multi-linear regression, structural equation modelling. For a more comprehensive presentation of results in the publications (under preparation), we use three-dimensional graphical analysis in combination with the non-parametric tests.

DESCRIPTION OF THE MAIN RESULTS OBTAINED

The results show that the labour conditions affect significantly the general state of health. As there is a wide spectrum of results, we select the most interesting ones. At the level of data for Portugal, the persons which are still economically active, having a job currently, age above of 50 found following significant relations:

Failure to show appreciation and recognition for work is connected with the higher risk of cancer and ulcer (stomach / duodenal / peptic).

Little freedom to decide how to organize work (autonomy at the work place) and high time pressure due to heavy workload is related, at the statistically significant level, with affective/emotional disorders.

Lack of autonomy of the decision-making at the workplace, is in the statistically significant manner, related to the risk of the heart attack and with the increased risk of cancer.

Increased time pressure due to heavy workload at the workplace, is in the statistically significant manner, related to the risk of a brain stroke.

Overall dissatisfaction with the work is, in the statistically significant manner, related with the increased occurrence of the cardio-vascular diseases.

Further details will be published at the conference New Trends in Management, 6-7 June 2019, Brenna, Poland, and will be submitted to the relevant international journal.

FUTURE COLLABORATIONS (if applicable)

As a first step we will present our results at the 6th International Scientific Conference "New Trends in Management and Production Engineering: Regional, Cross-border and Global Perspectives", 6-7 June 2019, Brenna, Poland. Organizers: WSB University in Dąbrowa Górnicza (Poland), University of Zilina (Slovakia) and VSB-Technical University of Ostrava (Czech Republic).

We plan the publications in the international journals (indexed in Scopus, Web of Sciences).