Reg. No: 2023/48/C/HS6/00040; Principal Investigator: dr Krzysztof Piotr Czaderny

## Purpose

This project proposes the analysis of intra-family transmission of health status and health risks with a strong focus on intergenerational transmission and present moderating effects. Given the high importance of socialisation in the family context, the project is highly important for the achievement of pragmatic goals of research, including formulating recommendations. The health risks are defined as non-medical, modifiable factors that increase the likelihood of developing a disease, the most important of which include: diet, addictions, lack of physical activity, and being overweight or obese (OECD 2020). The proposed study will employ both objective and subjective measures of health status (Ngamaba et al. 2017).

The Poland's Central Statistical Office extends the European Health Interview Survey to children aged 0-14 years. The first part of the project proposes to analyse Polish data on health status and health risks of children (n = 3,794) and the corresponding data on health status and health risks of their parents. As of now, in this part of the project, two groups of hypotheses can be formulated based on literature. In short, first, there is an intergenerational transmission of health risks from parents to children, which is represented by significant relationships between parental and child: (*a*) diet, (*b*) physical activity, (*c*) healthcare use, and (*d*) ignoring health problems. Second, sex of a child is a moderator in the relationship between subjective and objective dimensions of child health status, also when adjusting for socio-economic characteristics.

The second part of the project proposes to analyse data from the 3<sup>rd</sup> wave of the European Health Interview Survey, without limitation to Poland. In the second part of the project, three groups of hypotheses have been formulated based on existing evidence. First, there is a gap between European Union immigrants and natives in health status and health risks, which is differs by immigrant generation (first generation *versus* second generation), also when adjusting for age and socio-economic characteristics. Health assimilation of European Union immigrants differs across considered areas of health, meaning that the so-called "healthy immigrant effect" is not the only observed pattern. Second, life partners, including spouses, are matched in terms of health status and health risks, also when adjusting for age and socio-economic characteristics. Third, living with a partner is negatively associated with health risks and positively associated with health status. Due to the increasing role of cohabitation in Europe, the analysis of unions will not be limited to marriages.

## Importance

There is a rich body of literature on intergenerational transmission of socio-economic status, which has illustrated the degree to which there is equality of opportunity in society. However, as stated by Coneus and Spiess (2012, p. 89), "*very few*" studies have examined intergenerational transmission of health. More recently, this was confirmed by Halliday et al. (2019, p. 367), who stated that, in the literature, the topic of intergenerational transmission of health has been "*largely ignored*". Health is one of the most important components of welfare (Jones and Klenow 2016). Also, health is considered a form of human capital, which was first conceptualised by Grossman (1972).

The project will analyse lifestyle risk factors for diseases, which are considered of high importance for public health. The Canadian government's landmark (>5,000 citations) report suggested four health fields being major determinants of human health: lifestyle, environmental exposure, human biology, and health care (Lalonde 1974). An analysis of the risk factors for 10 leading causes of death in the United States attributed 50% of mortality to unhealthy lifestyles, 20% to environmental exposure, 20% to human biology, and 10% to inadequate health care (Centres for Disease Control 1977). Health factors related to lifestyles and health care services are broadly measured in the European Health Interview Survey.

## Outputs

The hypotheses will be tested in the partial least squares path modelling (PLS-PM) framework. As noted by Ahlburg (1998) and Halliday (2021), health is difficult to be measured. Hence, the current analysis will take a different approach than most previous studies. The variables chosen to measure different health risks will be considered formative indicators. Most previous studies on intergenerational transmission of health, e.g. by Case et al. (2002), Coneus and Spiess (2012), and Halliday et al. (2021), included a single measure of self-rated health status.

Five journal papers will be prepared within the project. The results will be also presented at conferences. Some analyses will be performed at the INVEST Research Flagship Centre, which is a joint effort by the University of Turku and the Finnish Institute for Health and Welfare.