Title: Health outcomes and income inequality : a multilevel analysis of the Wilkinson hypothesis **Author:** Jen, Min-Hua **Awarded:** 2006

Abstract:

This thesis aims to evaluate Richard Wilkinson's arguments that, in developed economies, it is not (absolute) income that is a main determining factor of health but the degree of inequality of income within a society. The distinctive nature of this thesis is twofold. This is the first study to analyse individual data at the scale of countries which was the scale used originally used by Wilkinson. Moreover, random coefficient modelling is used to model individual and country variables simultaneously and thereby overcome the ecological fallacy that has troubled previous research. The study is based on four distinct pieces of research, which are international-based comparisons of aggregated and individual level data through time. One is a longitudinal analysis of life expectancy at birth for some 196 countries across thirty years. Group trajectory modelling is used to reveal groups of countries with distinctive trends and these trends are then related to changing GDP and income inequality. Using this aggregated data, support is found for the Wilkinson hypothesis in that in developed countries life expectancy is related to GDP but not to income inequality. The other three studies are based on individual level data derived from the World Values Survey. These analyses provide a direct test of the Wilkinson hypothesis using micro data on individuals, and macro data on relative inequalities analysed simultaneously. They investigate the individual self-rated health associated with country income and inequality data, while also estimating the relationship between subjective well-being (happiness and life satisfaction) and individual income and country inequality. Finally, they uncover the underling relationship between individual self-rated health and individual and country level social trust as an evaluation of the hypothesis that social cohesion affects human health. In summary, with this improved methodology it is found that the Wilkinson hypothesis is not supported in terms of income inequality, but there is an effect for social trust, over and above individual factors.