Education gradient of physical health and mental health: A research on Turkish Health Survey

Introduction

Background

Health and education level are both indicators for human capital. Education is a process of acquiring knowledge and skills, main input for human capital. There are individual, business-level and social returns to human capital. High human capital endowed individuals are observed have higher incomes and higher well-being. There are also non-production returns to education (Lochner, 2011). Education level is linked to mental health as well as physical health. The average person with more education is expected to live longer and become generally healthier. The education gradient, or basically "the gradient," is how the human capital researchers refers to the significant positive relationship between health and education. Grossman (1972) viewed health as a form of human capital, which is a stock that can be accumulated through investment but depreciates over time. This convention is followed by health economics researchers.

The economic and psychological literature on how education influences health can be divided into two main strands: One focuses on behavioural responses to increased education (Llenas-Muney and Lichtenberg, 2005 ; Grossman, 2006; Brunello et al, 2016, Strulik 2013, van der Heide et al 2013) and the other examines health care affordability as a result of the increased economic and social resources resulting from education (Lin, 2002; Thoits, 2011; Ross and Wu, 1995, Ryan and Deci, 2000). The direct causal relationship between education and health is often emphasized in the health capital theory (Grossman, 1972a, b). Education is the most significant predictor of good health for both individuals and populations, according to a review of the evidence by Grossman and Kaestner (1997). In particular, health is more strongly connected with education than with occupational status or income. According to the health capital model (Grossman, 1972), education may result in allocative efficiency (adoption of healthier behaviours) or productive efficiency (reaching more health from the same set of inputs), both of which are factors in improving health. Level of individual education is also correlated with depression. Psychologists explain the relation between education and mental health by emphasizing the role of cognitive reserve (CR) (Meng and D'Arcy, 2012). Higher education levels imply higher levels of cognitive reserves.

Literature

The relation between education and mental health attract interest in economics since their labour market and welfare consequences. Although there is much evidence for positive effect of education gradient for physical health (Karaoglan, 2015; Dursun et al. 2019) , findings in mental health research is diverse.

Positive impact of education on mental well-being is observed in some branch of studies (Feinstein, 2002; Chevalier& Feinstein,2006; Van der Heide et al. , 2013 ; Crespo et al. , 2014; Kroh,2021; Wang, 2022; Sunder& Kondirolli, 2022). No significant effect is found in some studies (Glymour et al. 2008, Johansen et al. 2009; Dahmann&Schnitzlein, 2019; Viinikainen et al. 2018). One study that diverges from these results is (Avendona et al. 2006) which finds negative impact of education. There are relatively few studies examining the relationships between education and mental health for the developing country cases. Further research is required to reveal the precise mechanisms by which education affects mental health

Research questions and contribution

In this study we test the effect of education on physical health and mental health by using self-assessed health status and indicators for depression respectively in the framework of the Grossman (2000) model. Self-assed health status is an approximate measure of physical health. Depression is seen drastic decline in utility and value of life for unchanged fundamentals. There might be different effects of education on mental health and physical health. Although role of education on physical health is studied in Turkish case (Karaoğlan, 2015 ; Dursun et. al. 2018)to our knowledge there is no research on education gradient of mental health by using Turkish Health Survey.

Methodology

Empirical strategy is two stage instrumental variable method. Compulsory school laws are frequently instrumented for education level (Glymour, et al. , 2008). Turkish Health Survey (THS) has reported depression indicators for individuals. The data are extracted from four waves of THS which are 2012, 2014, 2016 and 2019. In line with previous applications, 1997 compulsory schooling reform is employed as instrumental for years of schooling. Depression score is derived from eight indicators of physiological conditions in Turkish Health Survey.

Expected Findings and paper plan

Karaoğlan (2015) carries out analysis on Turkish Health Surveys and she finds a positive relation between educational attainment and physical health and health producing behaviours. We expect a positive association between level of education and positive mental health indicators.

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