The dynamics of mental health in the British Household Panel Survey

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Abstract

There has been little research on state dependence of mental illness which is unfortunate since this could potentially improve our understanding of why some individuals are trapped in poor mental health over time. A better understanding of the persistence of mental illness could lead to better organisation and planning of care via the inclusion of state dependence in risk-adjustment mechanisms and efficiency-analyses.

This paper analyzes the dynamics of mental health using the General Health Questionnaire (GHQ) for 18 waves (1991-2008) of the British Household Panel Survey (BHPS). We have two key research questions: i) What is the relative impact of state dependence in explaining the dynamics of mental health? State dependence is the concept whereby the previous health state affects the current one; for mental health this could mean that individuals in poor mental health are trapped in their poor mental health state, and vice versa for individuals in good mental health. ii) What is the prevalence of sample attrition for mental health? Sample attrition is a natural process and of no concern as long as the attrition is random. If, however, individuals with worse mental health states leave the sample based on their mental health state, estimations using mental health could be biased.

The GHQ is a well validated clinical screening tool for mental well-being and the BHPS includes its 12-item version. The GHQ uses a Likert score whereby each item is scored from 0-3 and then summed, giving a range from 0 to 36. Pooled OLS regressions have been used to model the importance of state dependence on mental health controlling for a host of individual level characteristics such as gender, age, education, income, labour force and marital status as well as household size and time dummies controlling for temporal trends.

Results suggest that compared to results from the physical health literature, state dependence in mental health as measured by the GHQ seems to have less impact. No evidence for state dependence among individuals with poor mental health could be established. However, state dependence does exist for individuals with good mental health. Further, no non-random sample attrition could be identified using the full sample. However, sub-sample analysis has shown that there is sample attrition with respect to mental health for the elderly.

This paper has tested whether state dependence is a useful extension for models of risk-adjustment, efficiency analysis or the analysis of socio-economic inequalities in mental health.

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