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# Social and Regional Differentials in Population Health Status, Values for Health, and Subjective Well-Being in China

**ACADEMIC DISSERTATION**

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# ABSTRACT

The overarching aim of this thesis is to increase knowledge on population health-related quality of life and subjective well-being, and to explore values for health states in China.

The EQ-5D instrument was included in the National Health Services Survey 2008 (n = 120,700, aged 15-103 years) to measure health-related quality of life (HRQoL) in all 31 provinces in mainland China. Respondents completed the EQ-5D questionnaire and reported their current health status on a visual analogue scale (VAS), enabling the measurement of population HRQoL and its distribution in China, and modelling the association between the experience-based VAS values and self-reported problems on EQ-5D dimensions and severity levels. The Household Health Survey 2010 (n = 8,000, aged 15–102 years) used a question on self-reported happiness adopted from the World Values Survey (WVS) to measure subjective well-being (SWB), together with the EQ-5D, the VAS, and a self-rated health question.

The EQ-5D distinguished well for the known groups: there was a positive association between socio-economic status (educational level, income, and occupational status) and health status, and the a priori expected differences in health status between regions were observed among the Chinese population. VAS values were generally negatively associated with problems reported on the EQ-5D dimensions, and the anxiety/depression dimension had the greatest impact on VAS values. The feasibility of deriving an experience-based VAS value set for EQ-5D health states was supported. SWB varied with socio-economic characteristics in the expected way, and SWB varied strongly with subjective health status. Of the different dimensions of health, the anxiety/depression dimension was the most important for SWB. Reported SWB was also higher in rural counties than in urban counties in the same area, after controlling for socio-economic characteristics and subjective health status.

Norms for Chinese population EQ-5D health status were established, based on a national representative sample. The results showed that there were substantial differences in HRQoL and SWB across different socio-economic groups and regions, and that regional differentials were partly due to social differentials between regions. This thesis might provide important information for policies aiming at reducing inequalities in health in China. Knowledge regarding social and regional inequalities in different health dimensions in China, especially the anxiety/depression dimension, indicates the importance of mental health for individuals' HRQoL and SWB. The analysis of experience-based VAS values was significant in generating index values for EQ-5D health states but raised fundamental secondary issues concerning the universal nature of the classification system and the extent to which Chinese respondents utilise the same concepts of health as defined by the classification system.

**Keywords:** China; general population; health surveys; health-related quality of life; experience-based value set; subjective well-being; inequalities; socio-economic status