## **Abstract of thesis**

Individual differences affect how we perceive threat, and thus the way we respond to that. When a pandemic hits, it is essential for the public to respond homogenously, in particular measures that could prevent the spread of diseases. Most often, however, differences in effort spent on protective health measures are observed across countries and even within the same population. This study investigates how neuroticism and conscientious, two of the Big Five personality dimensions, could predict protective health behaviours under the context of COVID-19. This study utilized data collected from March to May 2020 at Hong Kong. Participants were invited to fill out a 21-day survey and report information regarding their daily experience fighting the pandemic. 57 males and 98 females were included in analysis. A series of multiple regression analysis was conducted to examine how neuroticism, moderated by conscientiousness, could predict anxiety level, protective health behaviour and risk perception of COVID-19 among participants. Results show a main effect of neuroticism and conscientiousness in predicting anxiety level and protective health behaviour respectively. Moreover, conscientious individuals are likely to perceive more risk under COVID-19. These results demonstrate how personality traits could govern protective health behaviour under the context of a pandemic and provide insights on the public health significance of personality traits.