

The University of Hong Kong  
Department of Psychology

*Departmental Seminar*

***Sleep and Circadian Rhythm Disruptions in Adolescents and  
Young Adults with Anxiety and Depressive Disorders***

Date: May 20, 2015 (Wednesday)  
Time: 11:30 a.m. – 12:30 p.m.  
Venue: Room 813, 8/F, The Jockey Club Tower, Centennial Campus, HKU  
Speaker: Mr. Mark Lawrence Wong  
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Getting into late adolescence and young adulthood, individuals get to face challenges in multiple domains. Many adolescents and young adults had sleep complaints. Most depressive and anxiety disorders also had a peak onset during these periods. Three studies were conducted to assess the relationship among sleep and circadian rhythm (SCR) disruptions and anxiety and depressive disorders in late adolescence and young adulthood.

Study 1 was conducted among 188 adolescents and young adults (46.8% with history of anxiety and/or depressive disorders) to characterize the SCR disruptions in these populations. In Study 2, 187 participants were assessed on their executive functions and other cognitive ability for two times, separated by either a daytime sleep opportunity or wakefulness. 166 participants continued in Study 3 and were assessed on their SCR disruptions and mental health conditions (42.8% with anxiety/depressive disorders in the recent 12 months).

Results showed that, individuals with history of anxiety and depressive disorders had more SCR disruptions and worse executive functioning than healthy controls. Some relationships between executive functioning and mental health condition were mediated by SCR disruptions. A daytime sleep opportunity was found to improve or refrain executive functions from deterioration across time. After adjusting for the effect of history of mental disorders, various SCR factors remained to prospectively predict anxiety disorders directly and depressive disorders both directly and indirectly through high experiential avoidance, self-blaming and low inhibitory control ability.

Taken together, during late adolescence and young adulthood, individuals with SCR disruptions might have increased chance of having worse executive functioning, developing depressive disorders and anxiety disorders. While SCR disruptions affected many pathogenic processes underlying a range of functioning, and SCR disruptions were mostly treatable and manageable, they should be considered as targets for prevention, assessment and intervention for adolescents and young adults.