



Department of Psychology
The University of Hong Kong
香港大學心理學系

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22
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Departmental Seminar

Modeling Multisystemic Interplays in Stress Adaptation



Mr Lik Liang

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11:00a.m. – 12:00n.n.

Room 715, 7/F
The Jockey Club Tower
Centennial Campus
The University of Hong Kong

Abstract

Stress adaptation is a dynamic process through which individuals respond to, regulate, and recover psychologically from stressful experiences. However, there remains a need to understand stress adaptation by integrating affective, behavioral, cognitive, and physiological processes across both chronic and acute stress contexts. Drawing on predictive modeling, multilevel analyses, symbolic regression, causal discovery, and experimental validation, these three studies provide converging evidence that positive stress adaptation arises from multisystem, time-sensitive processes. Affect dynamics and routine organization emerged as promising targets for clinical translation, while low physiological reactivity and rapid recovery may represent adaptive responses to everyday acute stressors. These short-term physiological patterns may be one pathway through which affective, cognitive, and behavioral resilience factors support long-term mental health. The findings also identified stress-related processes across neural, cardiac, and respiratory systems, as well as their complex interactions. These results have implications for accurate stress-state prediction and precision intervention. Together, these studies propose a precision-intervention framework for positive stress adaptation by helping identify who may be vulnerable to maladaptive responses, when support may be needed, and which targets may be useful.

About the Speaker

Lik is a PhD candidate under the supervision of Professor Tatia M. C. Lee. He received his MPhil from the University of Hong Kong and his bachelor's degree from the Education University of Hong Kong. His research focuses on the biopsychosocial interplay underlying stress adaptation and psychological resilience.

Zoom Meeting (For participants who couldn't attend the Seminar in person)

<https://hku.zoom.us/j/93343724399?pwd=i8njX4TjOF1bJWLI2N9GYaxh3gDziz.1>

Meeting ID: 933 4372 4399 Password: 278601

~ All are Welcome ~

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