



The University of Hong Kong
School of Biological Sciences

**Public
Seminar**

Green Space Mitigates Aggression: Evidence from Population- and Individual-Level Analyses

Date: 26 Nov 2024 (Tue)

Time: 11:00 am

Venue: KBSB 6N-11 & Zoom



About the speaker:

Yingxin Liang is a PhD candidate under the supervision of Dr. Christian Chan (Department of Psychology). She conducts research in environmental psychology with a focus on the relationship between green space and aggression. Her work employs Geographic Information System (GIS) techniques to measure neighborhood environments.

Abstract:

Contact with nature yields substantial psychological benefits, particularly in cognitive and emotional domains. Recent evidence also suggests its potential in enhancing interpersonal relationships. This thesis examines how the natural environment influences aggression—an adverse form of interaction—at both population and individual levels. At the population level, I used remote sensing imagery and police-recorded crime data to investigate whether natural space is related to domestic violent crime rates and whether natural space moderates the relationship between temperature fluctuation and violence occurrence. Results reveal that green space—measured as fractional coverage and population-weighted exposure—exhibits negative associations with both domestic and non-domestic violent assaults. Additionally, the moderating effects of spatial amount of green space and seasonal variation in vegetation on the temperature-violence link are supported. At the individual level, I examined the moderation effect of green space on the relationship between regional temperature and domestic violence using a large-scale survey dataset. The results reveal significant but distinct patterns for the spatial amount of green space and seasonal variation in vegetation. Finally, I investigated momentary interpersonal emotions in natural environments using an experience sampling dataset. I found reduced aggressive emotions and increased prosocial emotions while respondents were physically in natural environments. Collectively, these four studies consistently demonstrate the protective effect of green space against aggression.