



Department of Psychology  
The University of Hong Kong

香港大學心理學系

## Departmental Seminar

# The Impact of Mask Use on Face Recognition in Adults with Autism Spectrum Disorder: An Eye-Tracking Study

12:30 p.m. – 13:30p.m. | June 24, 2024 (Monday)

Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



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### Abstract

Protective masks during the COVID-19 pandemic are widely used during the pandemic. However, with the occlusion of the lower half of the face, mask use disrupts face perception in various dimensions. This effect may induce greater challenges in individuals with face processing difficulties, such as autistic individuals, further interfering with their social functioning.

Through comparing autistic and non-autistic adults in learning and recognizing masked faces, the current study found that although autistic participants generally had poorer face recognition performance than matched controls, the two groups were similarly impaired by mask use. Nevertheless, when viewing masked faces during learning, they showed a smaller tendency to look at the eyes and a smaller reduction in eye movement consistency as compared with controls; this was not observed during recognition. Across participants, selective attention ability and flexibility to change face scanning behavior according to mask conditions were two important factors accounting for individual differences in performance. Interestingly, the autistic spectrum quotient accounted for additional variance when recognizing masked faces learned also with a mask, suggesting additional influence from one's autistic traits that could have impacted face learning experience during development. These findings have important implications for identifying vulnerable populations whose face recognition ability may be particularly affected by mask use.

### About the Speaker

Mercury is a final-year PhD candidate under the supervision of Prof. Janet Hsiao at the HKUST and Dr. Xiaoqing Hu at the HKU. Mercury's research interests lie in visual cognition, emotion, and multimodal integration. Her PhD studies focus on how individual differences in visual strategies modulate visual perception and cognition.

~All are Welcome~

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