## The Impact of Air Pollution on OTC Drug Purchase

Yan Liu
Harbin Institute of Technology
Peng Zou
Harbin Institute of Technology
Jing Lei
University of Melbourne

## Cite as:

Liu Yan, Zou Peng, Lei Jing (2021), The Impact of Air Pollution on OTC Drug Purchase. *Proceedings of the European Marketing Academy*, 50th, (93618)

Paper from the 50th Annual EMAC Conference, Madrid, May 25-28, 2021



## The Impact of Air Pollution on OTC Drug Purchase

## **Abstract**

Self-medication through the use of OTC (over the counter) drugs is an important component in the frame of self-care. However, little is known about what factors, besides the symptoms that consumers experience, would affect self-medication behaviors. This research examines the impact of a significant environmental factor, air pollution, on how consumers respond to medical symptoms through self-medication with OTC drugs. We hypothesized that the severity of air pollution will have an inverted U-shaped moderation effect on the relationship between quantity of symptom search on the internet and OTC drug sales. Using a mixed panel dataset across 15 cities in China, we found that quantity of symptom search has a stronger impact on OTC drug sales when air pollution is moderate than when it is mild or severe. Our findings provide insights into how air pollution affects consumers' response to health-related threats and have implications for the OTC industry and consumers' well-being.

**Keywords:** air pollution; self-medication; over-the-counter drug

Track: Consumer Behaviour