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## Consumer surplus for air quality improvement in the transport sector in Klang Valley, Malaysia: Contingent valuation method and choice experimental approach (Article)

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### Abstract

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This study is an attempt to estimate consumer surplus for alternative air quality improvement in Klang Valley, Malaysia, using a double-bounded dichotomous choice contingent valuation method (CVM) and choice experiment (CE). Number of sick days, air pollution index, medical expenditure, outdoor activities, ethnic, city, age, and respiratory symptoms were found to be significant variables which affect the willingness to pay (WTP) of the respondents. Respondents' WTP is an average MYR 2.13 in CVM and the mean WTP for the new air quality management programme derived from CE is MYR1.99 per litre. The consumer surplus derived from CVM and CE is 0.23 and 0.09 respectively. Results show that although the consumer surplus derived from CVM is slightly higher than that from CE but they are not significantly different. The results suggest that both double-bounded CVM and CE can be successfully implemented for environmental valuation in Klang Valley. © 2019, ExcelingTech Pub, UK.

### SciVal Topic Prominence ⓘ

Topic: Choice experiment | Willingness to pay | Attribute non-attendance

Prominence percentile: 98.584 ⓘ

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Air quality Choice experiment Consumer surplus Double-bounded dichotomous choice contingent valuation method Willingness to pay

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