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Title: Delivering modal-shift incentives by using gamification and smartphones: A field study example in Bogota, Colombia

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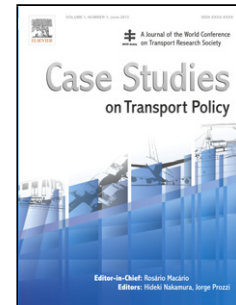
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Title.

Delivering modal-shift incentives by using gamification and smartphones. A field study example in Bogota, Colombia.

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Highlights

- Using gamification to modify travel behavior is proposed.
- A field study of this concept was carried out in Bogotá, Colombia.
- Results were inconclusive due to the small sample size.
- The experiment can be easily replicated elsewhere.

Abstract

This study investigates the use of both monetary and non-monetary incentives delivered through mobile phones, as a way of modifying citizens' behaviour, specifically when it comes to generating modal shift towards more environmentally friendly modes of transport such as walking and cycling.

A field study was carried out in the city of Bogota, Colombia using the concept of gamification. 20 subjects recorded their commuting trips for a two week period using a smartphone app that was developed specifically for this purpose.

Statistical analysis of the data showed that, even though there was an observed percentage change in mode choice from week 1 to week 2 towards higher incentivised modes (i.e. cycling and walking), the change is not statistically significant and therefore cannot be attributed to the incentives delivered during week 2. Furthermore even though there was an increase in the total time and distance recorded by the entire group of subjects (from 498.7 km and 32.5 hours during the first week to 799.9 km and 58.5 hours during the second week), the subjects did not alter their travel patterns significantly.

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