



HOW COULD SHARED E-MICROMOBILITY THRIVE AND REPLACE CARS FOR SHORT-DISTANCE LEISURE TRIPS? A STATED CHOICE EXPERIMENT IN BRAGA, PORTUGAL

Gabriel Dias
Elisabete Arsenio
LNEC, Transportation Department, Lisbon, Portugal
Paulo Ribeiro
CTAC, University of Minho, Guimarães, Portugal

ABSTRACT

The rise of shared e-scooters has transformed urban mobility, offering a flexible and accessible option for short-distance travel. This study explores the decision-making processes of shared e-scooter users for short leisure trips, focusing on the factors that influence their mode choices. A stated choice experiment carried out in Braga, Portugal, assesses how travel time, infrastructure, greenery, and financial incentives affect user decisions. Results show that e-scooter adoption is mainly motivated by convenience and infrastructure quality, while environmental aesthetics and monetary discounts have a lesser influence. Additionally, interactions with other road users are affected by infrastructure limitations and city design, with the absence of dedicated e-scooter lanes leading to conflicts in pedestrian and cycling areas. These findings emphasize the importance of city efforts to improve micromobility regulations and infrastructure planning for safer and more efficient e-scooter use. By understanding behavioral preferences and interaction patterns, policymakers can improve the sustainability and usability of shared micromobility services, reducing dependence on private cars for leisure trips and promoting fair urban mobility environments.

Keywords: shared micromobility, micromobility adoption, urban mobility behavior, stated choice, sustainable transport choices.

1. INTRODUCTION

Shared electric scooters (e-scooters) have rapidly emerged as a prominent mode of urban micromobility since their initial deployment in 2017. Their widespread adoption