

## Adaptation of transnational short-term residents: understanding the factors influencing residential location choice and travel behavior

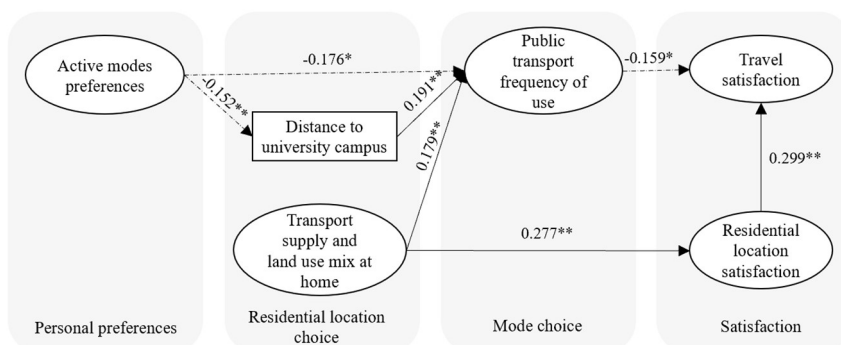
### Summary

The rise of a group of temporary residents that is composed of a set of people who move to another country not aiming to establish themselves, but for temporary stays, has generated new issues and needs derived from their interaction with the host city. However, the literature on the challenges and specificities that are involved in the process of international relocation and adaptation of temporary residents to a new configuration of transportation systems, spaces, and norms are scarce. Thus, this thesis aims to fill the literature gap on the intra-urban travel behavior adaptation and residential location choice of temporary residents in the context of an international relocation. By developing qualitative and quantitative analyses, we provide empirical evidence of travel behavior adaptation and its relationships with the residential location choice. The qualitative data collection and analysis was preceded by a literature review to better understand the dynamics involved in this phenomenon. We conducted and analyzed semistructured interviews to explore the travel and spatial behavior of international temporary residents, and econometric models (structural equations model and discrete choice model) were developed to search for empirical evidence of the relationship of factors identified as relevant for the travel behavior adaptation and residential location choice of temporary residents.

Data were collected four times in the space of 3 years, and respondents were living in the metropolitan area of either Porto, Lisbon, or Copenhagen by the time they answered the surveys. Findings include qualitative and quantitative evidence that temporary residents tend to change their travel behavior, presenting a low likelihood of buying vehicles, replacing individual private transport by Public Transport (PT) alternatives and/or active modes. Moreover, we found that the easier an individual perceives the use of public transport, the higher her/his frequency of public transport use and associated satisfaction with it. The use of technology as a mobility support tool boosts the ease of use of public transport, helping newcomers to have a smoother transition between different cities and countries. Different mechanisms of self-selection were also identified in the context of an international temporary relocation, where (i) previous travel habit influence the choice of residential location according to the desired public transport accessibility; (ii) budget constraints can prevent individuals from self-select themselves properly, resulting in individuals living in locations with lower levels of accessibility to transport and amenities. Moreover, evidence was found suggesting the influence of the residential location features on the frequency of PT use, satisfaction with PT, residential location satisfaction, and travel satisfaction. In addition, the relationship between mode choice and travel satisfaction was also observed.

### Keywords

Temporary residents, international relocation, mobility biography, mobility culture, residential self-selection, travel behavior adaptation, residential satisfaction, travel satisfaction, ICT.



\*\* indicates 95% credibility interval  
\* indicates 90% credibility interval

Model structure relating individuals' preferences and their residential location choice in the host city with their public transport frequency of use and travel and residential satisfaction.



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