

# **Getting from A to the Bahama's: An exploratory study of people with an autism spectrum disorder.**

V. Ross<sup>1</sup>, A. Neven<sup>1</sup>, K. Brijs<sup>1</sup>, E. Jongen<sup>2</sup>, V. Cops<sup>1</sup> and E. Hermans<sup>1,3</sup>

(1)School for Transportation Sciences, Transportation Research Institute, Hasselt University, Diepenbeek, Belgium, (2)Faculty of Psychology and Educational Sciences, Open University, Heerlen, Netherlands, (3)Department of Earth and Environmental Sciences, Division of Geography and Tourism, KU Leuven, Leuven, Belgium

## **Background**

Most scientific studies on autism spectrum disorders (ASD) started from a medical perspective, investigating causes, prevention, and treatment. Recently, research started to focus more on the daily problems experienced by people with ASD, requiring the identification of specific barriers (Hamed, 2013). It appears that people with ASD are limited in autonomy and social inclusion (Ross et al., 2015). This, for example, due to possible impairments related to use of public transport and driving, but also to the less explored domain of tourism (Feeley et al., 2015; Hamed, 2013; Ross et al., 2015). To the best of our knowledge these three components were not yet combined in one single study.

Regarding public transport, a number of potential obstacles can be categorized in 3 main categories: social contact (buying tickets, interacting with other passengers), imagination (next stop, transfer), and communication (buying tickets, asking questions, asking to stop at the correct stop). Moreover, structural problems may complicate traveling, such as availability or infrastructure (pedestrian routes, traffic lights, traffic density, etc.). Research in New Jersey (Feeley et al., 2015) confirms the use of public transport entails various potential difficulties. Similarly, independent car driving is a complex task with several subtasks to be executed in parallel (e.g. shifting gears, steering, changing lanes, and keeping traffic rules into account). In addition, driving conditions are variable (e.g. traffic jams, road blocks, and detours). Driving thus depends on driving experience, perception, and cognitive abilities. ASD features, such as cognitive dysfunction can interfere with driving (Ross et al., 2015). Similar problems can arise in the area of travel and tourism since travel can be overwhelming for people with ASD, especially when routines change. The latter can result in fear, and sensory problems. Despite that, most tourism related publications concern children with physical or significant cognitive impairments, instead of ASD (Hamed, 2013).

## **Objectives**

This cross-sectional survey study explores possible problems related to autonomy and social inclusion. More specifically, we developed a questionnaire focusing on the use of public transport, driving skills, and tourism.

## **Methods**

Questionnaires were distributed via schools, ASD societies, and social media. Inclusion criteria were a certified ASD diagnosis, and a signed consent form. Respondents could participate from the age of 17 years since this is the age at which people are allowed to learn to drive in Belgium.

## Results and conclusions

A total of 87 respondents started the questionnaire. Exclusion of incomplete questionnaires resulted in a final sample of 50 respondents (52% male, age: 17-48). Data analysis is currently ongoing. Via this study, we hope to provide practical guidelines to stakeholders in the domains of public transport, driving, and tourism.