

Virtual Reality Experiments in the Study of Migrant Integration

Bilal Farooq | Ryerson University

Stated Preference (SP) choice experiments have been used in a variety of contexts, e.g. mobility, marketing, agriculture, and energy, to understand and quantify human behaviour. SP experiments provide an extensive platform for studying human behaviour in controlled settings where the effect of each treatment can be studied in detail. Traditional tools for SP experiments, e.g. one-on-one, paper-based, or web-based interviews/surveys, are useful when the context is clear to the respondent. Such tools are also very useful where the respondents have a clear reference point to relate to when presented with a scenario. However, in situations where the scenario, technology, or service is entirely new, these tools suffer from a lack of realism and fail to capture the underlying true behaviour. Previous work has shown that the immersive virtual reality tool was able to account for these issues in mobility situations like the choice of a driverless vehicle.

This presentation outlines a hypothesis that virtual reality has the potential to become a robust tool to study the behaviour of new immigrants in the context of choices when migrating to unfamiliar neighbourhoods as well as the use of unfamiliar services. Building on our previous work, this paper presents a conceptual design of what a virtual reality experiment would look like for studying the new immigrant's neighbourhood choice behaviour. The sources of bias that may arise in the proposed virtual reality experiment and how such biases could be minimized will also be discussed.