

The role of culture and evolving perceptions in mobility choices amongst immigrants in Australia

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1. Introduction

Australian has a rapidly growing population fuelled by immigration. However, to date there has been very limited research on immigrants' travel patterns. South Asians are the largest and fastest growing immigrant subpopulation in Australia (Australian Bureau of Statistics (ABS), 2016), and they are known to be less car dependant and rely more on public transport than native-born Australians (Shafi et al., 2017, Shafi et al., 2020). However, they assimilate over the span of a few years and eventually rely more on cars. This study aims to understand why this happens. By utilising a qualitative approach, we examine:

- a) Cultural influences on mobility choices amongst South Asians,
- b) Inter and intra-household carpooling, and
- c) The 'honeymoon period' of positive attitudes to travel modes.

2. Literature overview

Immigrants have been found to have different travel behaviour compared to their native-born counterparts – this usually means less driving for their daily travel needs and greater reliance on non-driving modes of transport such as public transport (PT), walking and cycling and use carpooling more (Smart, 2015). However, over time, immigrants exhibit similar travel patterns to native-born citizens through a process referred to as travel assimilation (Pisarski, 2007).

Most research explains this assimilation process using improving socioeconomic conditions across the duration of residence for immigrants (Cline et al., 2009). Yet given that South Asians in Australia earn similar income to their native-born counterparts, and are generally more educated (Shafi et al., 2017), it is likely that socioeconomic factors will not sufficiently explain why South Asian immigrants assimilate their travel. Hence in this paper we explore more “soft” factors such as past experience, attitudes and culture.

Past travel experiences play an important role in shaping present-day travel behavior (Ouellette and Wood, 1998), although no research has explored this concept specifically for immigrants. For South Asians in particular, cultural factors governing their mobility choices are also of interest. Between poor public transport infrastructure (Hameed and Anjum, 2016), heavy reliance on motorcycles (Raza, 2016) and paratransit services such as rickshaws and autorickshaws (Shimazaki and Rahman, 1995) and a unique carpooling and carsharing culture revolving around chauffeuring (Enam and Choudhury, 2011), South Asian immigrants are likely to make unique mobility experiences compared to native-born Australians.

3. Data Collection and Analysis

The study was conducted in Greater Melbourne, Victoria, which is home to the highest number of South Asians compared to any other state in Australia (Australian Bureau of Statistics (ABS), 2016). A qualitative research approach was adopted to better understand the complex relationships between travel assimilation, attitudes and culture. The study was approved by the Monash University Human Research Ethics Committee (Project ID # 17351).

The interviews were structure broadly into three key segments, and explored a range of topics:

- Past travel habits and mobility choices
 - Exploring mobility choices *before* coming to Australia
 - Initial travel experiences upon arrival
- Present day mobility choices
 - Residential and travel choices and underlying reasons
 - Factors that influence present day mobility choices
- Future travel habit intentions and evolution
 - Self-reflection of how/ why participant’s mobility choices evolve
 - Future mobility choice intentions and motivations

A total of 13 South Asian households were recruited for this study who were represented by 20 participants through interviews. This included 8 families of Indian origin, 2 from Bangladesh and Sri Lanka each and 1 from Pakistan. Initial contact with cultural communities and potential recruits was facilitated through a city council. However, the COVID-19 outbreak in 2020 in Melbourne and consequent ‘stay at home’ orders resulted in the interviews moving online via Zoom or telephone calls.

To analyse the interview transcripts, a phenomenological approach was used to understand different life stages and events in immigrants’ lives that helped develop the way they perceive and view different travel modes. Thematic analysis was used to identify recurring themes and patterns across transcripts of conversations (Braun and Clarke, 2006). This analysis was supplemented with various forms of observational analysis such as body language, non-response or attempts at redirection of questions; such techniques have proven useful in the past and has been in this study as well (Welch and Piekkari, 2006, Manookian et al., 2014). Once the findings were summarised and concepts were generated, a technique commonly referred to as deductive reasoning (Elo and Kyngäs, 2008) was used to structure these concepts around existing frameworks (in this case, the Theory of Planned Behaviour).

4. Results

4.1. Cultural influences on mobility choices amongst South Asians

There were a wide variety of cultural factors that influence mobility choices. One was the need to live close to friends and fellow community members. One participant discussed how he chose a location *solely* based on his friends and fellow community members buying houses in the same area.

“Because of the community . . . there are a lot of Indians in this area, a lot of friends who are also buying in this particular area, so we just went with the majority with whatever everyone is doing.”

HH-3, M, IN

The role of gender in a South Asian household was highlighted in the interviews. It was apparent that women almost always assumed greater responsibility for their children’s upbringing and education, while maintaining contact with community members. Prior research has established that South Asian women have lower licensing rates than their male counterparts

(Shafi et al., 2017). Many women obtain their licenses *after* arriving in Australia, but females with full licenses still shy away from driving on family trips, with a male household member usually driving.

4.2. Inter and intra-household carpooling

There are two broad categories of carpooling - intrahousehold carpooling and interhousehold carpooling. Intrahousehold carpooling is where carpooling occurs amongst members of the household (commonly referred to as family trips). It played an important role in the travel behaviour of respondents, especially among the women (many of whom are unable to drive or are less willing to drive) and children (unable to travel independently) in the family. As such, they were being driven for family trips and sometimes even work trips by the male, meaning they were dependant on car-based travel without driving.

Perhaps more interesting was interhousehold carpooling, where carpooling was evident across families, households and within the community more broadly. Often this type of carpooling began very early upon their arrival in Australia. This early stage is when South Asian immigrants were the most reliant on their peers helping them; this is also the period they are *least* likely to own their own car.

“Mainly it was like . . . he [referring to a known contact] helped me initially just to go to some restaurants or to just buy some groceries and stuff for our house. And also, that time I didn’t have a car with me, and also I didn’t know how to get to the shops here so couple of times they helped me to do that.”

HH-1, M, IN

This is part of a larger assimilation process. Over time, PT use increases initially, while carpooling decreases.

During this period immigrants are trying to learn how to navigate their environment and independently travel without the help of friends or family. This period also sees little driving because they don’t yet own a car; they may be familiarizing themselves with road rules or be in the process of obtaining a license. When they acquire a car, PT use remains reasonably high, while they are in the process of replacing carpool trips with trips by driving. From then onwards, PT use decreases while car dependency by driving increases. The small proportion of PT trips are usually reserved for trips to the city, or for members who can’t or don’t want to drive every day or over long distances.

4.3. The ‘honeymoon period’ and its role in travel behaviour assimilation.

For our participants, initial impressions of infrastructure and services upon arrival in Australia were quite positive. PT information was easily accessible through technology, services were ‘always on time’, services were clean and secure, and patronage was low – all big positives from their perspective. Well-built infrastructure for active travel and drivers adhering to road rules was all impressive to the participants. We label this phase as the ‘honeymoon period’, and it lasts for a limited period. Over time, they tend to make fewer comparisons between Australian and South Asian transport systems and instead compare driving, PT or walking *within Australia*.

After the honeymoon period, PT sees the largest turn in attitudes. Over time, rather than the comparisons being PT in Victoria versus PT in South Asia (which generally makes PT in Australia look good at first), it evolves to PT in Victoria versus using a car in Victoria (where there were a lot of benefits participants were happy to discuss). The benefits of PT compared to cars were often overlooked; no value was placed on environmental benefits, health benefits, productivity benefits, or even cost savings.

“No, I didn’t see anything [speaking about environmental benefits of using PT]”

HH-10, F, IN

Active travel was a mode rarely used for making trips, so there wasn’t any strong opinions towards the mode (even though infrastructure was ‘excellent’). And cars, when compared to other modes of travel, remained the preferred mode of travel offering convenience, comfort and time-saving benefits. In a way, the benefits offered by cars are precisely why PT is not preferred.

5. Limitations and Future Research Considerations

While qualitative data is very rich, it is only collected from a limited number of individuals – a shortcoming regularly flagged by other qualitative researchers in this field (Beirão and Cabral, 2007). Participants may also not tell the full story or hide the truth (Clifton and Handy, 2003). And of course, the interviews were conducted among only one immigrant community and may not represent other communities (or even other cohorts within the South Asian immigrant community). As a result, the findings should be interpreted with caution and more research should be undertaken to generalise the findings amongst the wider immigrant communities.

6. Policy implications

Car ownership has been traditionally seen as an indicator of economic development (Vasconcellos, 1997). However, in an era of rapid climate change the challenge is to encourage more people out of cars and into sustainable modes of travel. Our findings suggest ways that planners and policymakers can support more sustainable travel among South Asian immigrants. To quote Tal and Handy (2010), immigrants could be the ‘agents of change’ that help to facilitate a transition to a more sustainable transport system.

One issue we identified is that our participants saw no real benefit in using public transport – even disregarding common ‘benefit’ factors highlighted in literature such as cost and environmental impacts. Australian PT systems are very expensive, with Sydney and Melbourne being in the top 10 most expensive cities for public transport monthly tickets (Reid et al., 2019). Cost barriers could be overcome by providing discounted family tickets to reduce the price of travelling as a group. Campaigns to raise awareness of the role of public transport in maintaining Australia’s air quality could help their willingness to move away from cars (Steg et al., 1995) - while this could benefit all residents, it may encourage immigrants more, especially those arriving from countries ranked lower on the Environmental Performance Index (Wendling et al., 2018).

Incentivising the use of other non-car modes amongst immigrants could be a possibility. Programs such as teaching immigrants to bicycle has proven to be effective, as programs in the Netherlands (van der Kloof et al., 2014) and Finland (Leppänen, 2017) – many of our participants (particularly female) mentioned that they didn’t know how to cycle. Commercial carsharing businesses could also potentially appeal to South Asians who are used to carpooling from their earliest days in Australia. On the other hand, driver licensing and car ownership requirements could be revisited to slow assimilation towards driving (or discourage car-dependency or existing vehicle users). Many countries discourage car ownership through high taxes and insurance premiums. Given that our participants considered cars to be “cheap”, perhaps policy planners could explore financial avenues of discouraging car use more generally.

Lastly, it is well-established in the literature that density facilitates more sustainable cities (Fatone et al., 2012). However, the Australian Federal Government is instead encouraging immigration into peri-urban and regional areas through priority migration schemes. Outer-suburban such as Pakenham (3801, VIC) and Officer (3809, VIC) are defined ‘regional’ for

federal migration purposes, encouraging immigrants to live even further away from sustainable transport options.

Car-dependency is a one-directional lifestyle transition, i.e., once you are car dependant, it is unlikely you will go back to using public transport. For our South Asian interviewees, this process is accelerated because of early reliance on carpooling, low urban density and high incomes. Without a change in direction, their future appears to be very car centric. Immigrants have the potential to be ‘agents of change’ and could help boost PT ridership, which in turn could have a ripple effect of improved PT and more ridership.

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