

# MAPx (Mobility Aid Personalization)

## A NEW perspective on some OLD problems

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*"I used to hate going out in my wheelchair, but now it's so much fun!"*  
 – Dorothy, 78 year old participant

**The Problem:** "We are far from understanding the complicated nature of the relationships between humans and assistive devices"<sup>[1]</sup>

Many older adults who would benefit from a mobility device do not use them.<sup>[1-3]</sup> The non-use of prescribed mobility aids among the older adult population is a significant problem as these older adults are at higher risk for inactivity, social isolation and falls.<sup>[4-6]</sup> Non-use is also a waste of healthcare dollars as discarded aids sit abandoned in garages and closets. **Research to understand why some use and others refuse their mobility devices is needed.**

**Purpose:** The purpose of the MAPx Project is to explore the process of mobility aid personalization and how it impacts the health and well-being of older adults.

**Methods:** Study participants were people over the age of 65 who had customized (personalized) their mobility devices in some way. Data was collected using informal field interviews (n=68) and go-along interviews (n=15). The go-along interview method combines focused interviewing with participant observation so that researchers accompany participants on their natural outings and actively explore their physical and social practices by asking questions, listening and observing.<sup>[7]</sup>

**Findings:** Analysis revealed two key findings:

1. Older adults personalize their mobility devices for reasons of *function* and *fashion*. *Function* includes the physical context (e.g., apartment with narrow stairs), key social roles (e.g., active and playful grandparent), and individual lifestyles (e.g., night owl, coffee drinker). *Fashion* includes aesthetics and personal preferences (e.g., colour, style) as well as the performance and preservation of identity (e.g., ethnicity, profession).
2. The impact of selecting or modifying a mobility device to suit individual needs and preferences facilitated device-acceptance, promoted physical and social participation, and provided a 'place' to perform and preserve identity among participants.

**Conclusion:** Encouraging mobility aid personalization is a promising strategy for understanding and promoting community mobility among the older adult population. Personalizing a mobility device can enhance the physical, psychological and social health of older adults.

**References:**

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- <sup>2</sup> Ipsos Reid (2009) Canadian Senior's Use & Views of Assistive Devices for Mobility.
- <sup>3</sup> Resnik, L., et al., Perspectives on use of mobility aids in a diverse population of seniors: Implications for intervention. *Disability and Health Journal*, 2009. 2(2): p. 77-85.
- <sup>4</sup> Rubenstein, L.Z., Falls in older people: epidemiology, risk factors and strategies for prevention. *Age and Ageing*, 2006. 35(suppl 2): p. i137-ii41.
- <sup>5</sup> Alpass, F.M. and S. Neville, Loneliness, health and depression in older males. *Aging & Mental Health*, 2003. 7(3): p. 212-216.
- <sup>6</sup> Kinne, S., Correlates of exercise maintenance among people with mobility impairments. *Disability & Rehabilitation*, 1999. 21(1): p. 15-22.
- <sup>7</sup> Kusenbach, M., Street phenomenology: the go-along as ethnographic research tool. *Ethnography*, 2003. 4(3): p. 455-485.



*"I lock up my stuff in this box"*

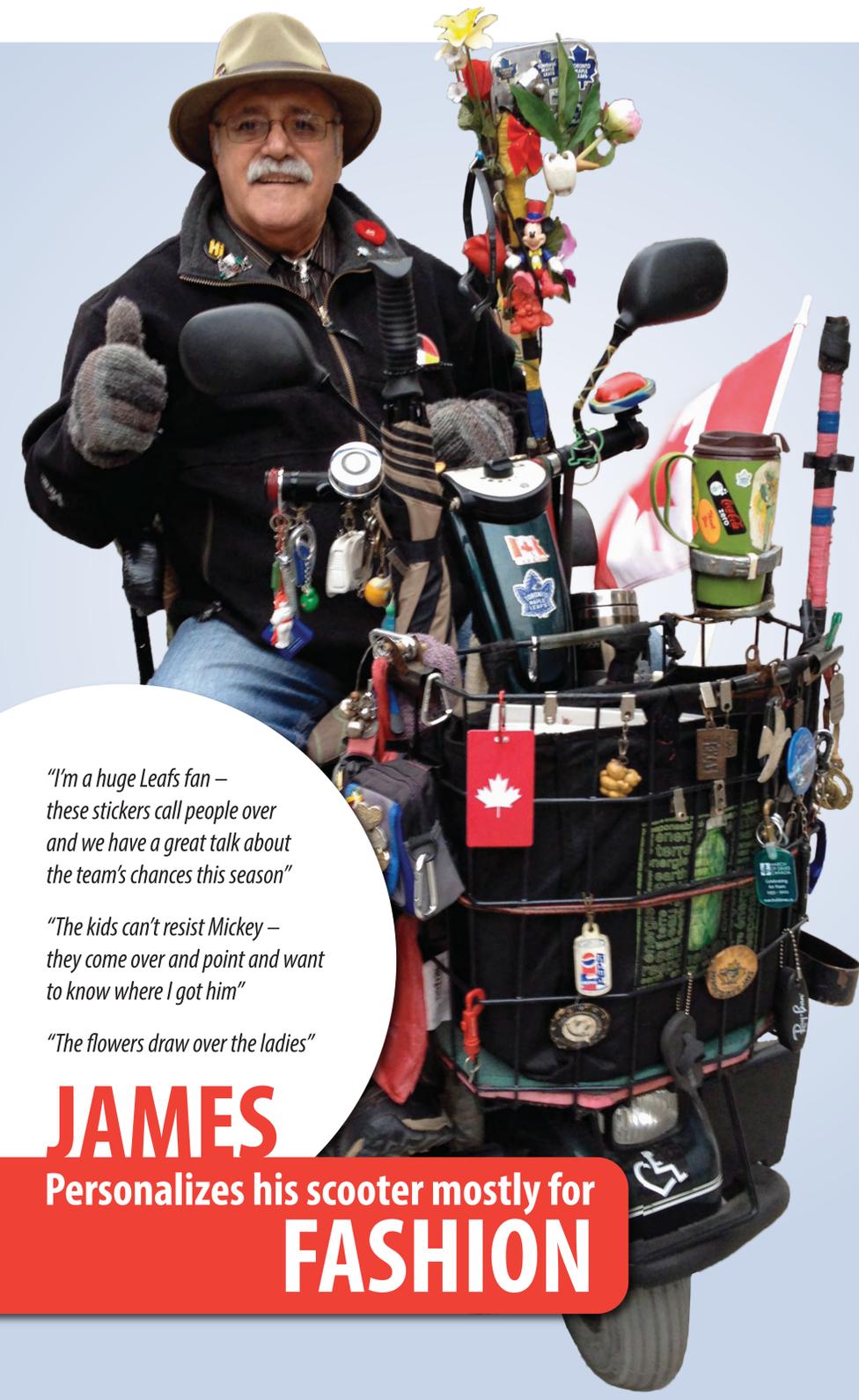
*"Me and my buddies built the frame around my chair so I can have this plastic around me, which I need in the winter"*

*"I'm out at night a lot, so I needed lights – I have them on the front and back"*

*"There's barely room in my chair for me, so I needed to add a roof rack"*

**MARIO**

Personalizes his motorized wheelchair mostly for **FUNCTION**



*"I'm a huge Leafs fan – these stickers call people over and we have a great talk about the team's chances this season"*

*"The kids can't resist Mickey – they come over and point and want to know where I got him"*

*"The flowers draw over the ladies"*

**JAMES**

Personalizes his scooter mostly for **FASHION**



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**TAKE-HOME MESSAGE:**

Personalizing a mobility device may seem trivial at first. We are beginning to understand however, that customizing a mobility device so that it not only fits an individual's physical needs, but also functions effectively within the contexts of their lives and reflects their identities, can have a profound impact. Efforts to support mobility aid personalization should be explored and promoted as they provide us with 'new' ways to address some of our 'old' problems, including social isolation, inactivity, and falls among the elderly.