

# ***“It’s overwhelming at the start”*: Transitioning to Public Transit Use as an Older Adult**

## **Abstract**

Independent mobility is an important component of healthy ageing. Public transit may be an affordable way to achieve independent mobility, and yet little is known about older adults’ transition to public transit. This paper addresses this research gap by providing an exploration of older adults’ experiences transitioning to public transit use, and by comparing these experiences to those of older people who have always travelled using transit. Twenty-four older adults (65+) living in Hamilton, Canada, who use public transit completed semi-structured interviews during which they discussed their experiences when they first began to use transit. These experiences are framed herein with the concept self-efficacy, i.e., how one’s belief in their ability to complete a task shapes their ability to complete said task. Results indicate that most older adults acquire skills to transition to public transit, such as trip planning, boarding, knowing where to sit, and exiting the bus. These skills are developed through practice. As one gains experience, one becomes more confident in their ability to meet their daily travel needs using transit. Therefore, the transition to public transit as an older adult can be more challenging for those with little experience using public transit. This paper highlights the danger of assuming all older adults will effortlessly take up transit and stresses the importance of older adults’ gaining experience using public transit.

Keywords: older adults, mobility, travel behaviour change, public transit, self-efficacy, qualitative

## 1. Introduction

The older adult segment of the population is growing at a faster rate than before (WHO, 2020a). As such, healthy ageing has become a public policy priority (WHO, 2020a). During the 73rd World Health Assembly in August 2020, the World Health Organization (WHO) declared 2021-2030 the “decade of healthy ageing” to encourage multi-sectoral and collaborative action to improve the lives of older adults (WHO, 2020a). Maintaining independent mobility is a component of healthy ageing. Mobility is a basic human need associated with independence, health, and well-being (Goins et al., 2015). Mobility is also important for older adults wishing to “age in place”, defined as continuing to live in one’s home or community with some level of independence, rather than in residential care as one ages (Wiles et al., 2011). Most older adults prefer to age in place, an option associated with increased independence, autonomy, and connection to social networks (friends, family, neighbours), than relocating to residential care (Wiles et al., 2011). However, ageing in place requires an equilibrium between older adults’ competences (e.g., functional frailty) and their environment (e.g., housing modifications) (Lawton et al., 1982). To successfully age in place, older adults must also remain mobile to stay physically and mentally active, to access desired people and places, to meet their daily needs, and to participate in social life (Luiu et al., 2017).

Empirical evidence has found that older adults stay mobile through driving, particularly in the North American context (Davey, 2007). However, not all older adults drive and as health problems arise many older adults must either reduce their driving or “give up the keys” (Chihuri et al., 2016). Though the rate of Canadians who use public transit decreases with age, for example while 12.8 per cent of millennials use transit, only 5.1 per cent of Canadians aged 56-64 years and 3.1 per cent of those aged over 65 years use public transit (Newbold & Scott, 2018), transit has been put forward as an affordable and environmentally friendly way for older adults to maintain their independent mobility (Gilhooly et al., 2002; Shrestha et al., 2017).

In her 2009 article “Meeting Transportation Needs in an Ageing-Friendly Community”, Sandra Rosenbloom warned “... there is little evidence that the United States is prepared to meet the mobility challenge facing older Americans” (p. 33). She argued that part of the problem is many wrongly assume older adults will simply turn to public transit when they can no longer drive. The same challenge faces seniors in Canada today: there is little evidence that

1 older Canadians take up transit as they age (Newbold et al., 2005; Newbold & Scott, 2018;  
2 Turcotte, 2012). In Rosenbloom's words:

3 Many assume that older people who face mobility problems or must cease driving will be  
4 served by public transit and by special demand responsive transportation services. Yet all  
5 indications are that neither traditional public transit services nor special demand services  
6 will come anywhere near meeting the mobility needs of the country's ageing population.  
7 [...] There is no evidence that older people suddenly begin to use public transit upon  
8 retirement. In fact, there is far more evidence that older adults are even less likely to use  
9 public transit when they retire than when they are in the labor force. [...] the overwhelming  
10 number of people now 65-plus probably never used public transit when in the workforce  
11 (p. 33).

12 In response to Rosenbloom's (2009) warning, the aim of this paper is to explore the processes of  
13 transitioning to public transit use as an older adult. Transitioning to a new travel mode is often a  
14 complex process; many continue to use other modes to meet all their travel needs (e.g., begin using  
15 transit to visit friends, but continue to drive to grocery shop). In this study, some participants  
16 suddenly became dependent on transit as their sole approach to travel, but most use transit as one  
17 of their many travel options. Further, we compare the experiences of those who have always used  
18 transit to those who begin using transit as older adults herein to shed light on the processes  
19 underlying this transition. Taken together, we concur with Rosenbloom and others (Newbold et  
20 al., 2005; Newbold & Scott, 2018; Turcotte, 2012) that "older people [do not] suddenly begin to  
21 use public transit" (p. 33). Instead, we argue that traveling using public transit as an older adult  
22 can involve the acquisition of skills, skills that are developed over time and through practice. Those  
23 with experience using public transit have already acquired these skills and can more easily  
24 maintain independent mobility as an older adult through public transport. We begin the paper by  
25 reviewing literature on travel behaviour change focusing on public transit and literature on self-  
26 efficacy, the concept that theoretically frames this research. We then outline the methods used in  
27 our qualitative study on older adults' experiences using transit. The results section is divided in  
28 three sections exploring confidence, skill acquisition, and how transit use self-efficacy can change  
29 over time. The paper concludes with a discussion of the implications of the results including a  
30 section on policy recommendations.

## 2. Literature Review

As the negative externalities of car-dependent transportation systems on the environment and population health are becoming increasingly clear, there has been increased attention in research and public policy on how to encourage people to shift from traveling by car to more sustainable modes of transport including public transport, walking, and cycling (Brog et al., 2009; Schmitt et al., 2019). As such, a large body of work examines the processes underlying travel decision-making. Research suggests that people's decisions about how to travel are shaped by habits and routine (Banister, 1978; Beige & Axhausen, 2012; Middleton, 2011), which can be barriers to travel behaviour change (Ramadurai & Srinivasan, 2006). Therefore, transitioning from private car to public transit, for instance in anticipation of driving cessation, may be particularly challenging for older adults who are accustomed to driving (Adler & Rottunda 2006; Alsnih & Hensher, 2003; Ricket, 2009).

Many studies have focused on factors that influence travel behaviour change by disrupting habits. For instance, key events, such as retirement or becoming a parent, can disrupt individuals' routines and make them susceptible to change their travel behaviour (Beige & Axhausen, 2012; Clark et al., 2014; McCarthy et al., 2019; Muggenburg et al., 2015). Retirement is one such event that has been found to influence older adults' travel behaviour change. For instance, one study found that retirement results in reduced car use and mileage over time, even though car use for leisure purposes increases after retirement (Siren & Haustein, 2016). More broadly, Berg et al. (2014) argue that retirement alters people's space-time restrictions which influences their mobility demands and mode choice. Here, resources can be used to overcome such restrictions, such as becoming mobile through partners, friends, and family, being able to walk or cycle, and the availability of services.

Other work has examined the travel behaviour change in response to external events, such as highway closures (Fujii et al., 2001) or 'Ride to Work Day' cycling events (Rose & Marfurt, 2007). Further, the introduction of new transit services (Nordlund & Westin, 2013) or the implementation free passes (Gould & Zhou, 2010; Skarin et al., 2019) have been found to encourage travel behaviour change. However, the process of travel behaviour change, or how one learns and habituates to new modes of travel, is still understudied in the literature (Schmitt et al., 2019). In fact, Muggenburg et al. (2015) argue that theoretical understandings of travel behaviour

change remain limited. This paper contributes to this field by exploring processes underpinning older people's transition to public transit use.

Understanding how older people transition to public transit use is important as many older adults experience driving regulation or cessation as they age. Foley et al. (2002) estimate that Americans will outlive their driving days by six years for men and eleven years for women. The proportions of Canadians with a valid driving license decreases dramatically with age: while 84.8 per cent of those aged 65- to 74-year-old have a valid driving license, this percentage drops to 61.3 per cent for the 80-84 age group and to 25.3 per cent for those aged 90 years or more (Turcotte, 2012). Driving cessation is often a difficult and emotional transition associated with loss of independence, reduced mobility, social isolation, and reduced self-esteem (Dickerson et al., 2017; Hansen et al., 2020; Haustein & Siren, 2014; Nordbakke & Schwanen, 2014; Turcotte, 2012). Of course, these negative associations may be due to a lack of adequate transport alternatives to the car for older people in many western contexts (Alsnih & Hensher, 2003). For instance, research in small towns and rural areas near Hamilton found that a lack of transportation options resulted in dependency on private vehicles amongst older residents (Hansen et al., 2020). Further, driving cessation is often preceded by a gradual process of driving regulation, a self-imposed reduction in driving to preserve safety and independence (e.g., only driving during daylight hours) (Goins et al., 2015; Hansen et al., 2020; Smith et al., 2016). Both driving cessation and driving regulation have been found to result in reduced trip frequency and reduced participation in social activities (Hansen et al., 2020; Nordbakke & Schwanen, 2015).

To better understand how older adults can maintain independent mobility by transitioning to public transit use, this paper draws on the physical activity literature's concept of self-efficacy, defined as "someone's belief in his/her capabilities to successfully execute necessary courses of action to satisfy situational demands" (McAuley & Blissmer, 2000, p. 85). The relationship between self-efficacy and physical functional performance has been studied in the physical activity literature (McAuley & Blissmer, 2000; McAuley et al., 2006). Specifically, self-efficacy has been found to be both a determinant and a consequence of physical activity: if one is confident in their ability to complete a task, they are more likely to do so, and as one completes tasks, one becomes more confident. Four factors influence self-efficacy: past accomplishments, social modeling, persuasion, and physiological arousal (Bandura, 1977; Bandura, 1982; McAuley & Blissmer, 2000). Past accomplishments have been found to be the most influential in influencing self-

1 efficacy (McAuley & Blissmer, 2000). People bring a wide variety of past experiences, some  
2 positive and some negative, with them when they complete a task. Past accomplishments  
3 interpreted as the result of a skill developed influence self-efficacy and are likely to lead to  
4 confidence in one's ability and future success. Social modeling, on the other hand, occurs when  
5 role models (friends, family members, mentors, etc.) succeed at a task. Seeing people successfully  
6 complete a task can influence self-efficacy by increasing their belief that they too can possess the  
7 skills required to complete said task. Social persuasion can also influence self-efficacy, this time  
8 through positive social or verbal feedback while undertaking a task. Finally, physiological arousal  
9 includes positive emotional and physical reactions that can facilitate self-efficacy. Negative  
10 reactions, such as anxiety or self-doubt, can have the opposite effect and reduce one's belief they  
11 can accomplish a task (Bandura, 1977; Bandura, 1982).

12 Self-efficacy has been used to understand behaviour change, such as tobacco use and  
13 exercise behaviour (Ryan, Patrick, Deci & Williams, 2008; Skarin et al., 2019). Further, some  
14 research has explored the role of self-efficacy in travel behaviour change (Crudden, Anotonelli, &  
15 O'Mally, 2016; Skarin et al, 2019). Focusing on a travel behaviour change intervention (i.e., free  
16 transit passes), Skarin et al. (2019) find that both self-efficacy and social support increase an  
17 individual's likelihood of achieving travel behavior change. In Crudden et al. (2016), self-efficacy  
18 and social problem-solving skills are found to help people who are blind or visually impaired  
19 identify and evaluate transportation options and travel arrangements. This paper builds on this  
20 research by exploring older adults' experiences becoming public transit users through a self-  
21 efficacy lens.

### 22 23 3. Methods

24 This study took place in Hamilton, Canada, a mid-sized, post-industrial city on the shores of Lake  
25 Ontario. Hamilton is served by a municipal transit system (the HSR) and regional transit  
26 connecting the city to other urban areas of southern Ontario (GO transit). The focus on this paper  
27 is the city's bus transit system, known as the Hamilton Street Railway (HSR). The HSR comprises  
28 a network of buses with an annual ridership of over 20,000 (City of Hamilton, 2020a) and  
29 Accessible Transportation Services (ATS) for those unable to access fixed-route public transit  
30 (City of Hamilton, 2020b). Seniors aged 65 years or older are eligible for discounted HSR fares

1 and Hamilton residents aged 80 or older can access HSR services for free when they register for a  
2 Golden Age Pass (City of Hamilton, 2020b).

3 This paper draws on a community-engaged study titled Understanding Older Adults Transit  
4 Use that was approved by the McMaster Research Ethics Board. Hamilton residents aged 65 years  
5 or older who use public transit (defined as having used the city's bus since January 2020 or be  
6 registered with the city's Accessible Transportation Service) were recruited to take part in this  
7 study. Recruitment took place between March and August 2020 and was completed through  
8 community organizations' listservs, posters on the City of Hamilton's official poster kiosks, and  
9 snowball sampling. Interested older adults were sent an information letter and consent form by  
10 email or mail ahead of the interview. Because this research took place during the COVID-19  
11 pandemic, all interviews were done over the phone or online to practice physical distancing.  
12 Therefore, oral consent was acquired over the phone or internet call before each interview.  
13 Participants were thanked with a twenty-dollar gift card to a well-known café chain.

14 While the interviewer had initial concerns about how conducting the interviews over the  
15 phone rather than in-person would impact the content and quality of the interview, they were  
16 impressed with how comfortable respondents were sharing their experiences, and sometimes  
17 painful ones at that, over the telephone. If anything, many respondents expressed how they were  
18 eager to share their experiences, and some human connection, through the interview because they  
19 felt isolated since lockdowns began. The original research design also included bus-along  
20 interviews where the interviewer was meant to join the participants as they prepared for and went  
21 on a journey by bus. However, these interviews did not take place due to the public health  
22 restrictions in place at the time. We believe valuable insight could have been gained through these  
23 mobile interviews and call for future research to do this kind of research, once it is safe to do so.

24 Though interviews took place during the pandemic, participants were asked to detail both  
25 their current and past experiences using public transit and other travel modes. Because this paper  
26 presents the results of older adults' transition to public transit, which occurred in the past for most  
27 participants, most of the results presented in this paper reflect the time before lockdowns, concern  
28 about virus transmission, and reduced travel. A paper presenting older adults' experiences using  
29 public transit during the pandemic has been published elsewhere (Ravensbergen & Newbold,  
30 2021). It is, of course, possible that the pandemic influenced participants' telling of their past  
31 experiences, even though the interviewer purposefully designed the interview guide to distinguish

current and past experiences on public transport. Further, some participants transitioned to public transport a few years ago, meaning their recall of this time of their lives may not be as accurate as those who more recently transitioned, or were in the process of transitioning, to public transport use.

Overall, thirty-two older adults completed one-on-one semi-structured interviews on their experiences using public transit, twenty-four of which used the public bus, the focus of this study. The sample was diverse, through a greater proportion of interviewees were female and retired (Table 1). More than half of the sample ( $n = 14$ ; 58%) held a valid driver's license when they were interviewed. Of the ten that did not, only two had never had a license.

Table 1. Research Participant Characteristics

Participant Characteristics		Number	Per cent
Gender	Women	15	63
	Men	9	38
Age	65-69	7	29
	70-74	4	17
	75-79	6	25
	80-84	5	21
	85-89	2	8
	90+	0	0
Residential Location	Downtown	11	46
	Local Municipalities	11	46
	Rural	2	8
Educational Attainment	Graduate degree	5	21
	Undergraduate degree	4	17
	College	6	25
	High school or less	9	38
Place of birth	Canada	17	71
	Outside Canada	7	29
Employment status	Retired	22	92
	Disability	1	4
	Full-time employment	1	4

The lead author conducted all interviews, which were approximately one hour in length. The interview guide contained two sections. Firstly, participants were asked general demographic and travel questions (10-15 mins), and then they were asked about their past and current experiences using public transit (45-50 minutes). The second section began by asking older adults to detail their experiences when they first started using public transit. Here, they were probed on



1 when, where, and why they started using transit. Participants' responses to these questions,  
2 questions related to travel behaviour change from diverse modes to public transit, are the focus of  
3 this paper.

4 All interviews were digitally recorded and transcribed verbatim in their entirety. The lead  
5 author transcribed the first four interviews while the remainder were completed through a  
6 professional transcription service. At this point, participants were given pseudonyms to ensure  
7 anonymity.

8 Once all interviews were transcribed, they were systematically and inductively analysed  
9 by the lead author using NVivo software. This analysis involves open coding, axial coding, and  
10 selective coding (Bryman, Bell & Teevan, 2012; Strauss & Corbin, 1990). First, open coding took  
11 place: all transcripts were read line by line and all potential themes were tagged on NVivo. Then,  
12 during the axial coding phase, the resultant themes were analyzed. Keeping in mind the broader  
13 context of the study, some themes were combined while others were divided. During the final  
14 phase, selective coding, the key themes, those that came up most frequently or had the most impact  
15 were selected.

16 During the open coding phase, themes that emerged related to this paper include Past  
17 Experience, Sudden Transition, Skill, Confidence, and Challenges. During axial coding, these  
18 themes were combined, as they all related to the transition toward public transit use. Most of this  
19 data comprised interviewees' responses to the questions about their experiences when they began  
20 to use transit. This data was identified as a key theme during selective coding that was named  
21 Travel Behaviour Change. All interviews touched on the sub-theme Skill, which led the lead author  
22 to explore the literature on skill acquisition. Here, self-efficacy emerged as a framework that  
23 helped to explain participants' experiences. In this paper, case studies from five individuals'  
24 experiences – are presented in narrative form and framed with the concept self-efficacy to shed  
25 light on the processes shaping travel behaviour change, a gap in the literature identified by Schmitt  
26 et al. (2019). The selected case studies represent key informants whose experiences were shared  
27 with other respondents; therefore, these narratives are supported by other interviewee quotes  
28 throughout.

#### 30 4. Results

1 A clear pattern emerged from the interviews: those who had always travelled using public transit  
2 were rarely aware of the sometimes-difficult transition to public transit use some older people  
3 experience. For instance, seven interviewees were life-time experienced riders who never had to  
4 learn how to use transit as an older adult. These ‘expert’ riders found using public transport easy,  
5 for instance Mabel (88 years) shared: “*I always call myself ‘The Bus Person’ (Laughs) I’ve no*  
6 *other way to get places*”, while Olive (66 years) said: “*But I’ve always taken the bus, so it doesn’t*  
7 *bother me taking a bus*”. These experienced riders were rarely aware of the ways in which transit  
8 can be poorly designed to meet their needs as older adults. Those experienced riders that were  
9 mindful of the challenges older adults can face accessing transit shared how this awareness was  
10 developed through hearing the experiences of other, less experienced, older adults. For instance,  
11 Mike (68), a confident public transit user, shared:

12 I have no complaints about the HSR [...]the only thing is learning- and when you talk to  
13 people that don't use the buses, that's kind of what they indicate is that, "...ah, I never know  
14 when it's coming...", or it's this, or it's that...and sure, I had a little, uh, anxiety[...] when  
15 you first start doing it, you, uh, you figure it out and then; then it's good.

16 Transitioning to public transit use as an older adult, on the other hand, can require the acquisition  
17 of skills. As will be discussed throughout, these skills include trip planning, boarding, knowing  
18 where to sit (or where not to sit), and exiting the bus. During the interviews, sixteen research  
19 participants discussed their experience acquiring these skills when they began using transit while  
20 one was still in the process of learning when they were interviewed. Framed by self-efficacy, we  
21 argue that those older adults with experience riding the bus earlier in their lives were more  
22 confident in their ability to ride transit while those with less experience had to gain confidence  
23 through practice. We explore older adults’ experiences becoming public transit users in three  
24 sections. The first section, Gaining Confidence through Experience, presents the story of Emily,  
25 the interviewee who was in the process of learning how to use transit as an older adult, to highlight  
26 the role of confidence plays in influencing travel behaviour change. The second section, Skill  
27 Acquisition, presents two narratives: a participant with a smooth transition to public transit use  
28 and one who had a difficult transition. Comparing their narratives demonstrates how transition to  
29 public transit can be supported by the four factors found to influence self-efficacy. The final  
30 section, Ongoing Transitions, expands on current understandings of self-efficacy by highlighting  
31 how transitions to public transit use are ongoing. This is done through two narratives, one of a

1 participant who loses confidence through sudden lack of experience, and another who gains it  
2 through sudden regular transit use.

#### 4 4.1. Gaining Confidence through Experience

5 For older adults with little experience using public transit, a lack of confidence was a major barrier  
6 to bus use. For example, take Emily, an 81-year-old participant who lives rurally just outside of  
7 Hamilton and was in the process of learning how to use transit during the interview. Her travel  
8 needs have always been met through driving, something her husband would primarily do. Emily  
9 is committed to staying in her farmhouse for as long as possible but is also facing challenges  
10 meeting her mobility needs by car now that her husband has passed away and she is partially  
11 visually impaired. She has begun regulating her driving by only driving during the daylight and to  
12 places she is familiar with because: *“I don’t want to lose my license and ah I need my license to*  
13 *stay rural. They go together”*.

14 Emily is actively preparing to remain in her rural home with little use of a car. She plans  
15 on doing this through a combination of riding the bus, rides with friends, and the use of the HSR’s  
16 Accessible Transportation Services. Though she intends on using the bus, she lacks the confidence  
17 to do so comfortably, something she shared with her friend, a frequent public transit user:

18 I said to my friend “you know what? I don’t think I can get on that bus!” she said “why  
19 not? You’re able to get on that bus” and I said “I don’t feel confident to go on that bus.  
20 After this exchange, her friend joined her on a bus ride to help her gain confidence: *“I went down*  
21 *to her place, she met me and then we got on the bus at [names location], that’s how I know about*  
22 *that bus”*. This accompanied bus ride helped Emily gain confidence:

23 When I was on that bus in February, I just said “oh my god this is like a king!” you know,  
24 sitting up there. I mean if I was using it all my life I wouldn’t feel that way, but I do feel  
25 that way.

26 In fact, it helped so much, she now wants to go on a practice bus ride on her own: *“So yeah*  
27 *basically what I might do is just get on it and go for a bus ride! (laughs)”*.

28 Emily’s story highlights the importance of confidence in travel behaviour change. Even  
29 though she is keen on using public transit, she did not *“feel confident”* using it until her friend  
30 showed her how to. She directly associates this lack of confidence with her lack of experience: she  
31 anticipates needing to *“go for a bus ride”* to gain that valuable experience and acknowledges that

1 things would be different “*if I was using it all my life*”. This result aligns with self-efficacy: Emily  
2 is not confident in her capabilities to successfully use transit because she has too few past  
3 accomplishments traveling using transit. She remains optimistic that she will acquire the  
4 confidence and skills necessary over time and through experience. In her words: “*I mean the*  
5 *anticipation of going to do it...once I’ve done it two or three times, and that’s everything, once*  
6 *I’ve done it 2 or 3 times, I’ll be fine.*”

## 8 4.2. Acquiring Skills

9 Sixteen research participants transitioned to public transit use as an older adult. All discussed the  
10 skills they had to develop to do so confidently and comfortably. Of these sixteen, thirteen described  
11 their travel behaviour change as relatively smooth while three found this transition very difficult.  
12 This section explores two case studies: Shirley, who experienced a smooth transition to transit use,  
13 and Nora, who had a difficult transition. Framed by self-efficacy, we compare their stories to  
14 demonstrate how the four factors found to influence self-efficacy, past accomplishments, social  
15 modeling, persuasion (social or verbal), and physiological arousal (McAuley and Blissmer, 2000),  
16 shape older adults’ transition to public transit.

### 17 4.2.1: Shirley’s Transition to Public Transport: “*that’s the kind of thing you learn to think about*”

18 Shirley is 81, holds a golden-age pass, and lives in a suburban area in the upper city of  
19 Hamilton. She began using the bus in Hamilton just over a year ago, however, she has past  
20 accomplishments using transit: she lived in Europe for most of her adult life where public  
21 transportation was her main travel mode. Shirley shared during the interview that her transport  
22 needs are currently being met; she can walk to all her necessities, has a car (though she regulates  
23 how much she drives), and is generally happy with the bus service, which provides some  
24 physiological arousal:

25 Well for me it's free: number 1. Number 2: Umm, you get to listen to the most interesting  
26 conversations, ‘cause everybody just talks out loud: especially the young kids ‘cause they  
27 put the white things in their ear, and they don't realize that they're telling the whole  
28 bus! (laughs) ...So I always find that kind of amusing, you know?

29  
30 During her interview, Shirley mentioned many of the skills she had to learn when she transitioned  
31 to public transit use, such as getting on and off buses with high steps, riding in crowded buses,

1 navigating snowy/icy sidewalks and bus stops, and getting to her final destination on foot  
2 (especially, she shared, when there are limited pedestrian crossings). However, Shirley learned  
3 how to overcome these challenges through experience riding the bus. When walking through the  
4 steps involved in her travel using the city bus, she began by discussing how she learnt to plan her  
5 trips. Here, her granddaughter played a key role by helping her download and use the city's public  
6 transit app:

7 I'm still not great on it, but she put it on my phone so I can look up when the bus is  
8 coming...she had to help me quite a bit... it's not all that simple, because you have to press  
9 a lot of buttons.

10 Despite initial challenges learning, Shirley went on to describe regularly using the app when she  
11 took the bus.

12 Other preparations include checking the weather (*"if you need an umbrella, you need an*  
13 *umbrella. If it's snowing, you make sure you have your boots on"*), making sure she's not carrying  
14 too much (*"you don't want to have to be lugging parcels and stuff, at least I don't, 'cause if the bus*  
15 *gets crowded then where you gonna put the parcel?"*), and having her bus pass ready (*"if you keep*  
16 *your bus pass on the outside of your purse you don't really have to do anything because you can*  
17 *just touch that to the screen..."*). When asked whether this planning and preparation was difficult,  
18 Shirley explained how it has become seamless for her: *"you kinda learn these things"*.

19 These things Shirley needs to think about and plan for are skills that Shirley has learned  
20 through practice. These skills do not stop there, as boarding, riding, and exiting the bus requires  
21 skills as well. In Shirley's word:

22 ...and you get on the bus, you gotta think, that's the kinda thing you learn to think about:  
23 So you're going to get on with your right hand (if you're right handed), and then you need  
24 to have your bus pass right ready -'cause that's the first thing that you do- and then you  
25 find a seat. So you just have to kinda make sure that your hand -that's why you can't have  
26 a lot of bags- at least I can't; as an older person. [...] getting on, you just get used to it, and  
27 also you know, sometimes, like when I first got on the bus, I used to go up the stairs at the  
28 back of those buses, and that's not very good for getting off, 'cause then you've gotta really  
29 hang on to come down those steps... So I never sit up there anymore, I know exactly where  
30 I sit (laughs) you know, you need to be near a pole that you can hold onto, and you can tell  
31 the bus to stop when you need to. [...] I've learned... I've learned, ya know

1 Gaining the knowledge and skills, as Shirley described, to successfully ride the bus can be a  
2 challenge to older adult riders experiencing declining mobility and new to transit ridership. Shirley,  
3 however, has overcome these barriers through experience. These initial barriers are things “*you*  
4 *learn to think about*”, things one must “*get used to*” to become a confident and skilled transit user.  
5 For example, Shirley’s experiences show how one can learn where to sit through experience, and  
6 specifically through bad experiences having trouble getting off the bus when seated near the back.

7 Shirley’s transition to transit use at 80 years old was a success. During the interview she  
8 shared how she had decided to give up her car, but then decided not to when the COVID-19  
9 pandemic was declared, and she decided to temporarily avoid transit to reduce her risk of being  
10 exposed to the virus. Shirley’s experiences becoming a public transit user highlight the skills  
11 required to do so as an older adult. Her story also supports the interdependent relationship between  
12 self-efficacy and experience. As she became more experienced, she became more confident and  
13 more likely to travel by bus, which in turn gave her even more experience. Further, all four factors  
14 found to influence self-efficacy according to McAuley and Blissmer (2000) influenced Shirley’s  
15 transition to becoming a transit user: she had past accomplishments using transit regularly when  
16 she lived in Europe, her grand-daughter provided social modeling and persuasion, and there is  
17 some evidence she experienced physiological arousal, for instance when listening-in on others’  
18 *amusing* conversations. These four factors were identified in many other respondents’ stories of  
19 their transition to public transit use. Past accomplishments, in particular, were regularly found to  
20 support older adults’ transition to public transport use. Indeed, of the thirteen participants who had  
21 a relatively easy time learning to use public transport as an older adult, all but one directly  
22 connected their ability to transition to past experience being a regular transit user earlier in their  
23 lives, be it, like Shirley, in Europe (as was the case for two interviewees), in nearby Toronto (the  
24 case for three interviewees), or many years ago in Hamilton when they were teenagers or young  
25 adults (the case for seven interviewees).

#### 26 27 4.2.2 Nora’s difficult transition to public transport use: “*I’m still in transition. I detest it*”

28 Not all older adults’ transition to public transit use was supported, like Shirley’s, through past  
29 accomplishments, social modeling, persuasion, and physiological arousal. For example, take Nora  
30 (66) who drove as her primary mode of travel until 2007 when she experienced a serious health  
31 problem that made her stop working and resulted in, in her words, “*immediate poverty*”. She

1 explained: *“I couldn’t afford my car, I sold it and then I had to figure out how to ride the bus.”*.  
2 This “figuring out” was a difficult transition for Nora: *“I’m still in transition. I detest it”*. Unlike  
3 Shirley who can access many amenities by foot and still owns and drives her car (though she  
4 regulates her driving), Nora suddenly had to meet her daily travel needs through transit. She shared  
5 how *“It’s overwhelming at the start”*. Unlike Shirley, no one supported her transition to public  
6 transit and using transit elicits no physiological arousal: *“I’m kind of exhausted from riding the  
7 bus for almost 14 years, it’s like God, I got to do this again?”*.

8         Though Nora’s transition was challenging, she has still acquired the skills necessary to  
9 meet her daily travel needs using transit through experience. She explained how she learnt how to  
10 *“plot your travel”*, for instance: *“If you need groceries, a book, the bank, your medication, you  
11 have to think OK how many of this – how much of this is on a straight line, how – because buses  
12 are linear”*. She has even developed a system to carry everything she needs with her, all the while  
13 keeping her hands free, which is especially important for her as she experiences balancing issues:  
14 *“into my backpack goes the umbrella, the water bottle, you know, the pashmina, the scarf, the little  
15 things you buy when you’re out and then, you see, when you got it on your back your hands are  
16 free”*. In line with self-efficacy, Nora has acquired the skills necessary to ride the bus through  
17 experience, and this experience has made her more confident. Framed by self-efficacy, her difficult  
18 transition to transit use can be understood through a lack of past experience, social modeling,  
19 persuasion, and physiological arousal. Nora wishes she still had access to a car: *“It’s a very  
20 different city when you ride the bus, it’s a very different – I’m controlled by the bus”*. Her transition  
21 to public transit use, though successful in that she acquired the skills required through experience,  
22 was not a choice but a decision forced upon her when she experienced health problems and could  
23 no longer afford her car. Nora also did not want to transition to public transit, she would have  
24 preferred to continue driving, which may have further contributed to her difficult transition. Unlike  
25 Shirley, discussed above, Nora had no choice but to use transit after financial hardship and feels  
26 *“controlled by the bus”*. Her difficult transition was shared by two others, who, like Nora, did not  
27 regularly use public transit in the past (past accomplishments), nor social modeling or persuasion  
28 by friends or family, nor any physiological arousal from traveling by public transport.

#### 4.3 Ongoing Transitions

1 Not only does riding the bus require acquiring skills that are developed through experience, but  
2 interviewee narratives demonstrate how these skills can also be lost through lack of practice or  
3 gained through sudden regular transit use. In this section, two narratives are presented to  
4 demonstrate how transitioning to public transport can be a dynamic and ongoing process.

5 When it comes to loosing skills through lack of practice, take Robert, who is 79 and has  
6 been using public transit daily since he stopped driving five years ago. This daily travel by bus  
7 stopped abruptly during the COVID-19 pandemic. Rather than this being due to worries about  
8 virus transmission on public buses, he shared how this sudden stop was because all his usual  
9 destinations were closed, meaning there was nowhere he needs to travel to: “*I haven’t been on the*  
10 *bus since the quarantine went into effect*”. Though normally a frequent and confident bus rider, he  
11 shared how this break from public transit has made him lose his confidence:

12 But I am acquiring an anxiety about getting back on the bus. I’m going to have to make an  
13 extra effort to get back into what was a very matter of fact routine. [...]. Yeah, I’d be  
14 anxious. I will be. But I’ll get on. But after a trip or two I will acquire my confidence again.

15  
16 The COVID-19 pandemic was an event that derailed Robert’s mobility routine and reduced his  
17 confidence through a temporary lack of experience riding the bus, a break in his usual “*very matter*  
18 *of fact routine*”. A frequent saying amongst older adult participants during the interviews was “*If*  
19 *you don’t use it, you lose it*”. Most said this to justify why they continued to do difficult physical  
20 tasks (such as climbing stairs or carrying heavy groceries). Here, Robert’s anxieties about getting  
21 back on the bus after the pandemic show how riding the bus is also an acquired skill that you can  
22 lose if you stop practicing the behaviour. Robert’s story supports the concept of self-efficacy in  
23 that it highlights how riding the bus requires skills, and that these skills can be acquired through  
24 practice, or “*a trip or two*”, practice which is needed to “*acquire [his] confidence again*”. It also  
25 shows how this process can be dynamic: skills can be gained through practice and be lost through  
26 lack of practice.

27 Events that derail routines can also help older adults gain confidence using public transit.  
28 For instance, Don (68) shared how his transition to public transit use was accelerated by a  
29 volunteering experienced that provided him with a free monthly bus pass. Like many others, Don  
30 shared how his initial transition had its challenges: “*Well it was [challenging] for a little bit but*  
31 *you know trying to find out scheduling and all that. What buses run where and what times. But I*



1 *gradually got used to it.*”. Like others, it also took time for Don to gain confidence through  
2 experience: “*[it took] maybe five six months before I really got the hang of it as to what went where*  
3 *and stuff*”. Unlike many others, however, Don’s transition to bus use was helped by a volunteering  
4 opportunity that provided him with free monthly transit passes:

5       It sort of helped then too because I was in this program [...] like an eleven-month program.  
6       And what they did there you got a monthly pass. HSR pass. Cause anywhere we went we  
7       had to catch the bus to the person’s house. So, I did that for eleven months and that really  
8       got me used to what buses went where.

9 Here, Don’s transition to public transit use was supported by an event that provided him with  
10 ample experience: “*I pretty well know where every bus goes now. I’ve been all over*”. This  
11 experience made him a confident public transit user. Taken together, Robert and Don’s experiences  
12 highlight how confidence and self-efficacy can be strengthened *and* diminished be through life  
13 events.

## 14 15       5. Discussion and Conclusion

16 In 2009, Sandra Rosenbloom warned: “there is no evidence that older people suddenly begin to  
17 use public transit upon retirement” (p. 33). This paper explores this warning by framing older  
18 adult’s transition to public transit use with self-efficacy. Results indicate that riding public transit  
19 as an older adult can require the acquisition of skills and knowledge such as trip planning,  
20 boarding, finding appropriate seating, and exiting the bus. Those with little or no experience using  
21 transit face a more significant learning curve than those with past accomplishment traveling by  
22 transit as they must acquire these skills and gain confidence in their ability to ride transit through  
23 practice. Therefore, this paper supports Rosenbloom’s (2009) claim: we cannot assume that all  
24 older adults simply ‘become’ transit users once they can no longer drive, even if they live within  
25 access to these services. Rather, becoming a transit user can involve a dynamic process of skill  
26 acquisition, and many older adults must first gain the confidence required through experience.

27       In doing so, this paper contributes to the literature on travel behaviour change, and  
28 specifically on the research gap identified by Schmitt et al. (2019) on the processes underlying  
29 travel behaviour change. This paper also supports the role of self-efficacy in influencing the  
30 transition to public transit use. Further, we find some evidence that the four factors identified by  
31 McAuley and Blissmer (2000), namely past accomplishments, for instance experience using public

transit from years ago or from living in another city, social modeling, such as having friends who also use transit, social or verbal persuasion, including encouragement from friends and family, and physiological arousal, such as enjoying travelling by transit, shape self-efficacy. These results are supported by recent research on travel behaviour change that has found that past experience using a travel mode, even in other places, can shape current travel behaviour (Morgan, 2020; Jain et al., 2021). We also contribute to this literature by highlighting the ongoing process of self-efficacy: confidence in one's ability to ride transit can be shaped, both positively or negatively, by events such as a pandemic or a volunteer experience involving frequent transit use.

Participants in this study had to have used public transit at least once since January 2020. Therefore, a limitation of this research is that all older adults had either already transitioned to or were in the process of transitioning towards public transit use. Therefore, future work can examine barriers to public transit use amongst older adults who do not currently use transit. This research could determine whether the skills required to use public transit reported herein prevent older adults from changing their travel behaviours altogether. Further, because this research took place over the phone during a global health crisis, participants' stories may have been influenced by the unique situation they were living in. Also, the retrospective nature of the stories told may not have been perfectly accurate, especially for those who were sharing experiences that took place years in the past. There is also some evidence that self-efficacy may vary across social characteristics, such as gender (McAuley et al., 2006). Participants were not probed during the interviews on how their gender, class, race/ethnicity, or other axes of identity may have shaped their transition to public transit use, therefore, future work can explore how these processes vary across axes of social difference.

Results indicate that learning the skills necessary to ride the bus as an older adult can be relatively seamless for those who have past experiences using transit or whose transition to public transit use is supported (e.g., by friends, grandchildren, etc.). This highlights the importance of programs that provide the opportunity and supports for older adults to try transit. This finding is supported by Shrestha et al. (2017) who stress the importance of older adults becoming familiarized with mobility alternatives to the private car. We agree with Shrestha et al. (2017) that there is a need to develop and implement targeted interventions for those transitioning to public transit in their older years.

Such targeted interventions have taken place in Hamilton. For example, to encourage physical activity levels amongst older adults the Hamilton Council on Ageing developed the *Let's Get Moving* program in 2017, which included a workshop called *Let's Take the Bus* (WHO, 2020b). This training was part of a three-part series that also included workshops called *Let's Take a Walk* and *Let's Ride a Bike*, all of which were facilitated by older adults (WHO, 2020b). Twenty-nine *Let's Get Moving* workshops attended by 704 older adults took place between 2017-2019 (WHO, 2020b). The *Let's Take the Bus* workshops allowed older adults to try public transit, an experience argued to facilitate the transition to public transit use in this paper. None of the research participants of this study participated in these workshops, therefore, future work can evaluate *Let's Take the Bus* success in supporting older people's transition to public transit use.

Similar user training programs have also taken place across cities in Germany and Austria (Marin-Lamellet & Haustein, 2015). Further, other interventions to aid in older adults' transition to public transit might include the provision of detailed information targeted for older adults, such as walking distances, number and size of stairs, and presence of elevators and/or ramps (Marin-Lamellet & Haustein, 2015). Further, programs that match older adults with someone to accompany them as they make a trip may provide the social support required to gain confidence (Shrestha et al., 2017). Pricing incentives are another practice to support older adult's mobility on transit (Marin-Lamellet & Haustein, 2015). Perhaps further discounting senior fares in Hamilton, for instance by lowering the eligibility age for the Golden Age Pass (currently set at 80+) to ensure older adults are provided with an incentive to try public transit at a younger age. Transit agencies can also take steps to reduce the physical burden of this transition for older passengers as well. For instance, more accessible bus interiors (e.g., ramps to board, spacious interiors, additional prioritized seating, etc.) may reduce the skills required to learn so skills identified in this study such as boarding, finding appropriate seating, and exiting the bus.

Of course, public transit is not the only type of mobility that requires the acquisition of skills and the development of confidence through practice or experience. For instance, many participants shared how they regulated their driving because of a lack of confidence in their abilities, often specifically for certain trips or times of day (like Emily and Shirley above). Also, some participants shared how they believed riding the bus kept them active and able to participate more fully in other aspects of social life. Therefore, though we find that using public transit as an older adult can require the acquisition of skills and confidence, we wish to avoid framing public

transit as unsuitable for older people. Rather, we argue that easing the transition to transit use for older adults is an important objective in this WHO Decade of Healthy Ageing.

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