

ACTIVE TRANSPORTATION EXPERIENCES OF RACIALIZED YOUTH
IN NOVA SCOTIA

by

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This thesis was conducted in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People, which is also the land where African Nova Scotian people have lived for over 400 years. As settlers of this land, we have a responsibility to learn the history of this land, and the peoples who have shaped it.

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Dedication

I want to dedicate this thesis to all the amazing women of colour who have motivated and inspired me throughout my life. I hope that through my work and through my journey, I can help break the colour barrier so that others who look like us can come after us.

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Abstract

Introduction: Physical activity (PA) supports the health and well-being of youth. Active transportation (AT) during the adolescent years aids youth in acquiring enough PA to achieve desired health and well-being outcomes. However, access to and engagement in PA and AT are not possible for all youth. Racialized youth experience inequities to PA and AT. For example, AT policies often do not sufficiently consider strategies to enable racialized youth to participate. As such, racialized youth may be at risk for reduced PA and AT. **Purpose:** This study aimed to understand how racialized youth living in Nova Scotia are engaging in AT from both their perspective and the perspective of their caregiver. The following research questions guided this exploration: (1) What are self and caregiver-perceived barriers that obstruct racialized youth from engaging in AT, (2) What are self and caregiver-perceived enablers that support racialized youth in engaging in AT, and (3) What are potential strategies recommended by racialized people that could increase racialized youth AT? **Methods:** This study used a qualitative dyadic approach and was guided by a social constructivist worldview. We recruited racialized youth (ages 7-15 years) and a caregiver to participate in a one-on-one semi-structured interview. The interview questions were open-ended and informed by Critical Race Theory and the socioecological model. Interviews were transcribed verbatim. Data were analyzed using the Framework Method adapted to be used with reflexive thematic analysis and narrative analysis to develop meta-stories that further contextualize the findings. **Results:** Eight dyads or triads of racialized youth and their caregiver participated in interviews. Youth identified as boys (n=5; ages 9-14 years) and girls (n=5; ages 8-15 years). Caregivers (n=8; ages 36-51 years) included 5 mothers, 2 fathers, and 1 grandmother; all identifying as the primary caregiver of their participant child/children. Respondents identified as African Nova Scotian, Black, South Asian, or as mixed race. Three themes were generated from these interviews: (1) Walking in Fear, (2) Neglected or Forgotten Racialized People, and (3) Community is More than Physical Environment. Findings were further contextualized through three diverging meta-stories: (1) The Family that Can't Safely Use AT Due to Governmental Neglect, (2) The Next Generation Using AT Despite Safety Concerns, and (3) The Family That Walks and Bikes Together. **Conclusions:** This thesis provided lived experience perspectives into the inequities impacting AT access for racialized youth in Nova Scotia. This study highlighted how racialized youth are often neglected when it comes to access and engagement in AT. The youth and caregivers in this study provided suggestions to support AT of racialized youth in the province. In sharing the voices and lived experiences of racialized youth and their caregivers, this research can inform and motivate action towards more inclusive AT policy and practice across Nova Scotia.

Keywords: Racialized children, active transportation, systemic racism, built environment, Nova Scotia, health inequities, dyadic analysis, narrative analysis.

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Chapter 1: Introduction

Health-related behaviours during childhood and adolescence often track into adulthood, which can impact a person's health across their lifespan (Graham-Demello et al., 2021). For example, by engaging in sufficient physical activity (PA), a child or youth may reduce their risk of developing chronic health conditions such as cardiometabolic or musculoskeletal problems (Katito & Davies, 2021), or mental health challenges (Adler & Snibbe, 2003). While there is sufficient evidence to indicate that engaging in PA is important during the childhood and adolescent years, many children and youth are not engaging in sufficient PA. In fact, there was a 6% and 14% reduction in the number of children (ages 5-11 years) and youth (ages 12-17 years) respectively, meeting the 24-hour movement guidelines from 2018 to 2020 (ParticipACTION, 2022). These guidelines state that children and youth between the ages of 5-17 years should engage in at least 60 minutes of moderate to vigorous PA per day (ParticipACTION, 2022). Seeing as how health during one's childhood and adolescent years has implications for lifelong health, it is important to work at increasing PA behaviours during this age. This can be an important time to focus on developing lifelong PA habits as children and youth become more independent and have more of a say in how, when, and where they move (Larouche et al., 2023).

Active transportation (AT) is defined as any human-powered transportation, including, but not limited to walking, wheeling, cycling, scooting, or public transportation, used for the purpose of getting from one location to another (Brand et al., 2020). AT is typically seen as an accessible form of PA that people can simply include within their daily routine, as time is generally seen as a significant barrier to AT

engagement (Prince et al., 2022). Additionally, different social determinants of health, which are factors influencing health that aren't medical, and situational circumstances, such as unique family dynamics, can impact how a child engages with AT (Katito & Davies, 2021). Racialized youth, who are any non-Indigenous youth who are not-Caucasian racially and don't identify as white in colour (Statistics Canada, 2022), for example, often experience inequities in access to and engagement in PA and AT (Baig et al., 2009; Kunaratnam et al., 2022). Lack of access and engagement opportunities for racialized youth can be fueled by racism and discrimination (Duncan et al., 2015). With reduced PA and AT, racialized youth may be at a higher risk of experiencing poor health outcomes due to the impacts of racism and discrimination (Baig et al., 2009; Duncan et al., 2015; Katito & Davies, 2021; Kunaratnam et al., 2022). It is important to recognize and identify the social determinants of health when working to create interventions and programs that look to increase PA and AT with these underserved people and communities, such as racialized children and youth (Brand et al., 2020).

Increasing PA participation is a priority within the province of Nova Scotia (NS), leading to the creation of the Make Your Move campaign (Healthy Tomorrow Foundation, 2023) that was sparked by the Canada-wide Let's Get Moving initiative that is working to increase PA levels on a national scale (Public Health Agency of Canada, 2018), as well as its provincial counterpart, Let's Get Moving NS. The Make Your Move initiative is working to increase overall PA throughout the province through the implementation of infrastructure changes such as improved crosswalks and sidewalks, the connection of trails, bike lanes, etc. (Healthy Tomorrow Foundation, 2023). They have also placed a focus on increasing AT throughout the province (Brand et al., 2020). As

Let's Get Moving NS is working to increase AT engagement across the province, there is a need to consider diverse perspectives.

This thesis focused on the AT of racialized Nova Scotian youth. Racialized youth within NS are a diverse population made up of African Nova Scotian and Black, followed by South Asian, Arab, Chinese, and Filipino people (Government of Canada, 2023). The diversity of racialized youth across NS presents the need to understand the complexities of the different social determinants of health that impact these individuals. Improving PA levels through increased AT could lead to increased health and well-being over the lifespan.

1.1 Statement of the Problem

Racialized youth face historic and systemic barriers that result in health inequities and reduced health outcomes (Katito & Davies, 2021), as well as increased mental health challenges (Adler & Snibbe, 2003). These health impacts could be the result of a largely sedentary lifestyle (Crist et al., 2021). Though AT has been identified as an effective intervention for increasing PA and reducing the impacts of sedentary behaviours, there has been low uptake by racialized people (Baig et al., 2009; Duncan et al., 2015; Kunaratnam et al., 2022). This is significant due to the high need for an increase in PA levels within the racialized population of NS as a result of the disproportionate health challenges faced by this population (Owen et al., 2012). Many of the barriers that contribute to this reduced engagement in PA and AT are rooted in discrimination and racism (Echeverría et al., 2015; Kunaratnam et al., 2022; Roberts et al., 2019). This is due to the history of systemic racism within Canada that has impacted the lives of racialized people (Roberts et al., 2019). Additionally, as racialized youth are often not considered

within AT planning and literature, there is a need to hear their lived experiences to better understand AT needs and support strategies from their own perspectives. More specifically, there is a need to identify potential barriers and enablers so that interventions that are put into place are informed, evidence-based, and more effective.

1.2 Purpose and Significance

The purpose of this study was to explore the barriers and enablers that racialized Nova Scotian youth experience regarding their engagement with AT from the perspectives of both the youth themselves and their caregivers, to add further context to the lived experiences of the youth and the family dynamics that impact these experiences. Findings from this thesis can help to develop an understanding of the racialized experience and how it impacts AT engagement. From this understanding, this thesis could inform culturally and racially informed interventions that are aimed at increasing the PA and AT engagement of racialized youth and could have overall impacts on the health and wellbeing of this population.

The voices of racialized people are often left unheard within health research, as the knowledge gained from studies conducted on white people are often unethically transferred onto this population (Aldred et al., 2021). There is a need to empower and build a foundation of health knowledge specific to the unique experiences of racialized people within Canada (Aldred et al., 2021; Kunaratnam et al., 2022). This thesis presents the voices of a segment of racialized people, adding to the existing AT literature and evidence and providing insight into the experiences of racialized youth and their PA behaviours.

1.3 Research Questions

Using a hermeneutic phenomenological approach, informed by the socioecological model (SEM) and critical race theory, the following questions informed this thesis:

1. What are self and caregiver-perceived barriers that obstruct racialized youth from engaging in AT?
2. What are self and caregiver-perceived enablers that support racialized youth in engaging in AT?
3. What are potential strategies recommended by racialized people that could increase racialized youth AT?

1.4 Researcher Positionality

Due to the interpretive nature of the methodology chosen for this thesis, it is important for me to be reflexive, and position myself as I engage with this work (Matua & Van Der Wal, 2014). First off, I personally identify as a racialized individual, I am South Asian, or Brown, and am aware that my unique lived experiences impact the way I engage with AT. I also recognize that, though I may have shared experiences and thoughts with those who are participating in this study, my unique experiences all intersect to influence my views on PA and AT resulting in potential differences in we all engage with AT. I specifically identify as a second-generation Canadian, a child born within Canada to two immigrant parents. My racial/cultural identity is just as much a defining part of who I am as my Canadian identity, as I would say I have integrated them both. I also identify as a woman and know that due to this fact I am sometimes hesitant to use AT as my primary mode of transportation due to a fear for personal safety, especially

at night. Despite this hesitancy, walking is still my main form of transportation as renting or purchasing a vehicle is beyond my current financial resources. I also live within a 20-minute walk of all the locations that I travel to frequently, so walking is very convenient.

Having spent most of my life living on the Western Coast of Canada may also have led to significant differences between my lived experiences, and those of individuals who have only lived on the East Coast. Having lived specifically within British Columbia, I would say that my AT engagement was significantly impacted due to the ease with which people can use the public transit system to supplement AT. The public transit system, in addition to the changes in infrastructure to include bike lanes, as well as reduced locations available for parking a vehicle all contribute to AT being seen as an optimal, safe, low-cost option for travel. I also recognize that AT is not as accessible within NS and that creates barriers for engagement.

I am also a Certified Therapeutic Recreation Specialist (CTRS) with a bachelor's degree in Therapeutic Recreation. Having completed a four-year degree looking at the benefits of leisure and PA engagement ensure that I am an advocate for increased participation, both for those I work with and for myself. I strongly believe in the potential of recreation and leisure to significantly improve the quality of life and wellbeing of all. Additionally, my pursuit of a Master of Arts degree in Health Promotion has made me very aware of the need for creating culturally and racially informed interventions and evidence-based services for racialized youth within NS.

Though this is a fully developed study, my connection to the Communities on the Move (CoM) evaluation has also influenced my views surrounding AT accessibility within NS, as I have been working as a research assistant on this evaluation project for

two years. I have gained exposure to the discriminatory experiences of African NS people, as well as the different views of those living within rural NS communities, where AT infrastructure is limited or non-existent. My involvement in this work includes this thesis, another qualitative study looking at the movement behaviours of women over the age of 45, primary data collection (qualitative and quantitative), report writing, and attending meetings with the evaluation team and at times the community leadership teams (Antigonish County, the Town of Lockeport, the Municipality and Town of Yarmouth, and Wagmatcook First Nation) working on this study.

I am also a relatively new researcher, as this is only the second study that I have worked on where I have been the primary researcher, though I have worked on several qualitative studies in various capacities. As I have conducted this work from planning and proposing the study to writing this thesis, I committed to opening my mind and practicing reflexivity and reflection regarding the data collection and analysis in addition to the research process. This has ensured that the voices and experiences that are shared with me by racialized children and their caregivers guide and shape this work to authentically convey their story.

1.5 Thesis Overview

This thesis is comprised of six chapters. Chapter 1 offers an introduction to this thesis topic, relevant background information, the purpose of this work, and the researcher's positionality on this topic. Chapter 2 presents a review of the literature relevant to this thesis and places this study within the frameworks, theories, and approaches used. Chapter 3 details that methodology and research design used. Chapter 4 displays the results of this thesis. Chapter 5 presents the interpretive discussion and

potential implications of these study findings. Finally, Chapter 6 imparts reflections and study conclusions. Additionally, the appendices, found at the end of this thesis, provide further detail and context.

Chapter 2: Review of Literature

2.1 Health as a Right of all People

The World Health Organization (World Health Organization, 1946) defines health as a state of complete physical, mental, and social well-being that is a fundamental right of every human being without regard for any discriminating factors such as race, gender, age, etc. Health can also be defined through a holistic view that acknowledges the social, physical, emotional, cognitive, and spiritual domains of health that move beyond the Western medical model that focuses on preventing or curing disease (McKee, 1988). Holistic health uses a systems approach to health where all the domains are connected and interact with one another to balance overall health (McKee, 1988; Austin, 1998). Poor health is reflected by an imbalance in any one or more domains (McKee, 1988) or through an imbalance in one's health resources that fall within these domains and the challenges that the individual faces (Gallant & Tirone, 2017). To improve health, the individual or community is empowered to take an active role in the healing process, leading holistic health to fall within a biopsychosocial framework that focuses on the strengths, limitations and resources within the individual and/or community themselves (Austin, 1998; Gallant & Tirone, 2017).

2.1.1 Rights of the Child

Children living within Canada are protected by the United Nations (UN) Convention on the Rights of the Child, which Canada signed in 1991 (Public Health Agency of Canada, 2011; United Nations, 1989). This document states that children have the right to not face discrimination of any kind, to have decisions made with their best interests in mind, to live and develop to be the best people that they can become, and to

have their voices and opinions heard and considered in all issues that could impact them (Public Health Agency of Canada, 2011). As health is a fundamental human right (World Health Organization, 1946), the voices and experiences of children must be considered in all health-related decision-making that has any bearing on children.

Additionally, the principle of non-discrimination within the UN Convention (Public Health Agency of Canada, 2011) can be applied to any form of discrimination, including discrimination on the basis of one's racial identity. As a result, racialized children living within Canada are protected the same as all other children who are protected by this Convention. Their racial identity cannot be used against them, and they have the same right to have their voices, opinions, and lived experiences heard and considered in all health-related decision-making that concerns them.

2.1.2 Rights of Racialized People

The rights of racialized people in Canada are protected by the Canadian Charter of Rights and Freedoms (Government of Canada, 2020) as well as the Canadian Human Rights Act (Government of Canada, 2021). These constitutional acts state that all people have the right to not face discrimination or harassment on the basis of race, and that all people are equal under the law, regardless of their differences (Government of Canada, 2020, 2021). As these are constitutional acts, the health and wellbeing of racialized people living within Canada is protected from discrimination.

2.2 Physical Activity is Fundamental in Achieving Health

PA engagement is an essential component to developing and maintaining health over the life course (Kinder et al., 2020). It was found that there are generally around 5.3 million premature deaths related to physical inactivity each year (Addy, 2012; Lavie et

al., 2014). Physical inactivity can lead to the development of various chronic health conditions such as obesity, coronary heart disease, hypertension, stroke, type 2 diabetes, and some cancers, that can all lead to this premature death (Katito & Davies, 2021). Within the mental health domain, physical inactivity has been associated with decreased self-esteem, confidence, and well-being, in addition to increased diagnoses of anxiety and depression (Adler & Snibbe, 2003; Katito & Davies, 2021). As health during one's youth contributes to lifelong health (Graham-Demello et al., 2021), compounded with the fact that physically inactive youth are more likely to become physically inactive adults (Kunaratnam et al., 2022), physically inactive youth can develop these chronic health conditions that can lead to premature death (Adler & Snibbe, 2003; Katito & Davies, 2021). In following PA guidelines, youth can reduce their risk of developing these conditions. They can also enhance their cognitive function and academic ability through PA engagement (Chaddock-Heyman et al., 2014).

Within Canada, guidelines state that children between the ages of 5-17 years old should aim to get at least 60 minutes of aerobic PA per day (Canadian Society for Exercise Physiology, 2021). In addition to this aerobic activity, it is advised that children include activities that will strengthen bones and muscles at least three days per week (Canadian Society for Exercise Physiology, 2021). Though following these guidelines can significantly improve lifelong health (Brand et al., 2020), it was found in 2022 that only 28% of Canadian children were meeting these guidelines (ParticipACTION, 2022). There is a real need to improve access to and utilization of health promotional efforts to increase youth PA engagement (ParticipACTION, 2022).

As previously mentioned, health during childhood has implications for lifelong health, health behaviours, and habits (Graham-Demello et al., 2021). Sedentary behaviours in youth can lead to the development of adult cardiometabolic and musculoskeletal conditions, as well as poor mental health (Kunaratnam et al., 2022). As youth become less physically active, (ParticipACTION, 2022), there is a need to engage with youth and implement informed and targeted health promotional strategies aimed at increasing PA and movement.

2.2.1 Types of Physical Activity

PA can be broken down into two main categories: structured PA and unstructured PA. Structured PA includes any activity that could be seen as pre-planned or organized (Behrens et al., 2019). This could include activities such as gym class, skills-based classes or programs, sports, etc. Unstructured PA includes activities that allow for choice, creativity, and independence, where children can grow, learn, and begin to value PA engagement and its benefits (Kinder et al., 2020). Though the benefits of unstructured activity can be easily seen, at school or through community programs/sports, children often only engage in structured PA (Behrens et al., 2019). As children are engaging in most of their PA through school or community recreation opportunities, there is a large gap in unstructured PA engagement (Kinder et al., 2020). To create more of a balance between both forms of activity, a focus should be placed on creating more opportunities for unstructured PA engagement. A simple method for increasing unstructured PA and creating this balance could be through AT engagement.

2.3 Active Transportation

AT is defined in the literature as any form of human-powered transportation, including, but not limited to walking, wheeling, cycling, scooting, or public transportation, used for the purpose of getting from one location to another (Brand et al., 2020). It is seen as one of the leading strategies to increasing PA among people, regardless of their demographic differences (Brand et al., 2020). AT is regarded as such an effective intervention, as it is seen as typically accessible and easy for people to incorporate within their daily routines, and can simply replace a motorized form of transportation that individuals are already using (Prince et al., 2022).

2.3.1 Personal Health Benefits of Active Transportation

This unstructured form of PA is a much more effective and beneficial method of increasing children's daily PA than creating more opportunities for structured PA, as children can gain the additional benefits associated with unstructured PA (Kemp et al., 2019). Health benefits seen over time as a result of walking or biking to and from locations rather than using motorized forms of transportation include reduced risk of cardiovascular disease, diabetes, and stroke later in life (Adkins et al., 2017; Bosch et al., 2019), reduced risk of developing some cancers during any stage of life (Echeverría et al., 2015), as well as reduced mental health challenges such as depression and anxiety that could be diagnosed at any stage of life (Brand et al., 2020; Elliott & Bopp, 2022). The unstructured nature of AT can support children's growth and learning as there are additional opportunities for increasing independence and creativity (Kinder et al., 2020). There is also increased opportunity to create social connections with others in the community as people participate in AT and bump into others who are also engaging in

AT (Adams et al., 2017). This could lead to an increase in community capacity, that could enable communities to become more resilient.

2.3.2 Other Benefits of Active Transportation

AT may also contribute to environmental benefits and safety, as an increase in AT could lead to a reduction in motorized forms of travel and traffic (Elliott & Bopp, 2022). This could result in a reduction in daily carbon emissions and empower people to take charge of protecting their community environment (Kunaratnam et al., 2022). Physical safety could also be increased due to reduced vehicle traffic and increased safety on the road (Kunaratnam et al., 2022). AT is also a more cost effective form of travel that could reduce the economic burden of those with a lower socioeconomic status (SES) (Adams et al., 2017).

2.3.3 Determinants of Active Transportation

Though AT is seen as quite accessible, there are a number of determinants that impact one's access and ability to engage with AT. A family's SES can greatly affect children's ability to engage in AT (Pabayo et al., 2012). If a family has a low SES, it has been found that they are more likely to engage in AT due to not having access to a vehicle (Pabayo et al., 2012). Though this fact could be seen as positive, these children are engaging in AT out of necessity, not choice, and many encounter dangers as they commute around their communities (Murtagh et al., 2016; Pabayo et al., 2012). These dangers are associated with higher levels of criminal activity and violence within these lower SES neighbourhoods, as well as environmental hazards that impact some communities due to historic racism (Murtagh et al., 2016; Pabayo et al., 2012).

Children living within communities with proper crosswalks and traffic lights were found to be more likely to engage in AT due to an increased sense of safety when moving around their community (Pabayo et al., 2012). One's social circle was also found as an influential factor in determining if children would participate in AT. Children who had a large number of friends living within the same local area were more than twice as likely to engage in AT than children who didn't have the same social circle within their local environment (Pabayo et al., 2012). Living within urban areas and having older siblings were also positive indicators for AT engagement (Pabayo et al., 2012).

2.4 Designing Communities for Active Transportation

Due to the many benefits of AT engagement, Canada has developed a National Active Transportation Strategy 2021-2026 (Infrastructure Canada, 2024). The goal of this strategy is to promote AT and its benefits throughout the country (Infrastructure Canada, 2024). This strategy was supported by a fund of \$400 million spread over five years and is driven by the framework A.C.T.I.V.E., which stands for awareness, coordination, targets, investments, value, and experience (Infrastructure Canada, 2024). Goals of this fund and strategy are to improve community connection and promote social equity among vulnerable Canadians (Infrastructure Canada, 2024). Within the NS, this strategy has put in motion plans for the development of an All Ages And Abilities Bicycle Network throughout the HRM (Infrastructure Canada, 2024).

Another focus of this strategy is the development and/or enhancement of infrastructure that makes AT an accessible form of transportation for all (Infrastructure Canada, 2024). Infrastructure that supports the usage of AT includes sidewalks, bike lanes, trails, and other such built environment features including residential density and

land use (Kornas et al., 2017). Walkable communities have also been found to foster community wide health (Duncan et al., 2015). If children and families begin using AT, it could develop into a lifelong habit that leads to maintained PA engagement throughout one's life.

Environmental features that can improve health include green spaces such as community gardens, parks, or open spaces (Mitra et al., 2020; Truong et al., 2022). Open and unstructured areas like parks or more rural communities encourage increased outdoor activities and play (Mitra et al., 2020). They can also lead to higher levels of PA as children tend to move more when playing in outdoor spaces (Mitra et al., 2020). Green spaces can play a restorative effect on mental health and well-being (Truong et al., 2022). These spaces also work to increase community capacity by fostering social connections through shared interests (Truong et al., 2022). They also improve the aesthetic of a community, which has also been found to increase youth engagement in AT (Echeverría et al., 2015). Aesthetic features that reduce this engagement can include graffiti, poor lighting, and reduced green spaces (Echeverría et al., 2015). The creation of aesthetically and physically safe communities can reduce parental fears of allowing their children to engage in AT on their own (Royne et al., 2016). Not all Canadians have been able to see and experience these benefits though as racialized people experience barriers to AT, PA, and overall health.

2.5 Factors Impacting Racialized People's Health

Racialized people are at an increased risk of developing cardiometabolic conditions such as obesity, heart disease, stroke, and type 2 diabetes, as well as increased mental health challenges to name a few (Katito & Davies, 2021). This reduced health

when compared to the overall population is due to inequities in resources and opportunities related to several interconnected social determinants of health. These inequities largely are rooted in systemic racism and discrimination. Systemic racism is when racial inequity and disadvantages are built-in to the processes and structures of a society (Banaji et al., 2021). This racism can be seen in institutional structures, social structures, as well as everyday interactions (Banaji et al., 2021).

2.5.1 Acculturation

Though all racialized people within Canada, at some point within their ancestry could be described as immigrants to the country, acculturation is a concept that can only be ascribed to racialized people within NS who don't identify as African Nova Scotian.

Within Canada's mosaic model, many immigrants have carried over the cultural identity and collectivism of their country of origin and have passed down that culture to their descendants (Berry & Hou, 2016). This unique circumstance has brought about the concept of acculturation. Acculturation is defined as the strategy an individual uses to identify and find belonging with the culture of their racial/ancestral identity: integration, assimilation, separation, or marginalization (Berry & Hou, 2016; Echeverría et al., 2015; Walker et al., 2015). The acculturation strategy that one employs can impact the way that the individual interacts with their surroundings, and how those external factors, such as one's community, interact with them in turn (Walker et al., 2015). Negative impacts of acculturation need to be resolved as they go against Canada's Multiculturalism Policy. This policy identifies that one's cultural identity should not impact their ability to participate equitably and fully in all aspects of Canadian society, and that efforts should

be made to remove any potential barriers impeding this access (Government of Canada, 2014).

Acculturation can impact AT accessibility on intrapersonal and interpersonal levels. Racialized youth may feel safety, comfort, and belonging while engaging in AT around their community, if they have assimilated to the culture of that community (Rothe et al., 2010). On the other side of the spectrum, if they hold themselves separate from the culture of their environment, identifying only by the culture of their racial identity, or by neither identity, which is marginalization, they may not feel as safe or welcome to travel around their community (Pottie et al., 2015). If they have integrated both cultures within their identity, they may feel comfortable in their community while still connecting with both cultures (Walker et al., 2015). The acculturation strategy chosen has influence over one's wellbeing as well, with those who implement the integration strategy having on average better mental health and life satisfaction scores, followed by separation and assimilation, and then marginalization (Berry & Hou, 2016). As stated previously, mental health and wellbeing have profound impacts on the overall health of racialized youth, and those who don't connect with their community may have access to fewer resources and supports that may improve their health status (Berry & Hou, 2016; Echeverría et al., 2015).

2.5.2 *Collectivism*

Though all racialized people may not identify with collectivism, it is an important factor to consider when working with racialized populations, as the culture of these communities may be more collectivistic (Samuel, 2009). Within collectivistic cultures, a larger priority is placed on the group rather than on the individual (Jiao & Zhao, 2023).

The individual is mainly seen as a member of the larger cultural group, and individuals within this group are interdependent on each other (Jiao & Zhao, 2023). The group or collective could be as small as one's immediate family or as large as the entire community. Many racialized groups may identify as collectivist, though Canadian culture is typically individualistic and autonomous (Jiao & Zhao, 2023). Acculturation levels can impact collectivism as later generations may identify as more Canadian and individualistic as time goes on, creating a new and unique kind of family dynamic (Gallant & Tirone, 2017).

Many collectives share traits like racial background, language, and culture as new immigrants often settle in communities where they know they will find belonging (Balakrishnan, 2001). This can also be connected to racism as there are fewer opportunities for racist encounters when one lives around other racialized people (Agrawal, 2015). The Canadian mosaic model and culture of the country also motivate the desire to protect the shared ethnic heritage, culture, and values (Balakrishnan, 2001).

Collectivist communities also tend to have high levels of community capacity. Community capacity refers to the community factors or resources that are connected to human capital, organizational resources, and social capital that support the holistic health and wellbeing of the community (Beckley et al., 2008; Birgel et al., 2023). Communities that work together to solve health related challenges are more likely to achieve this improved health (Birgel et al., 2023). Resources that contribute to community capacity include economic capital, which are physical resources like infrastructure, businesses, utilities and the like, social capital which includes social relationships and networks within the community, natural capital such as quality of the air, water, and soil, and

human capital referring to the education, informal learning, and of community members (Beckley et al., 2008). Having an increased community capacity leads to greater community resiliency, enabling the community to persevere through negative events, while also supporting the health and wellbeing of the communities inhabitants (Birgel et al., 2023; Gallant & Tirone, 2017). Communities with high levels of community capacity have increased access to AT due to this resiliency and connectedness. The community and its people have greater resources that they can mobilize to support health promotional activities (Gallant & Tirone, 2017).

2.5.3 Socioeconomic Status

SES is a social determinant that can lead to inequities in the health of racialized individuals (Adler & Snibbe, 2003). SES is a measure of household financial resources that are driven by an individual's occupation, education, and income, all of which racialized individuals disproportionately see reduced levels of (Adler & Snibbe, 2003). These reduced levels of occupation, education, and income can impact the environment/community in which an individual may live, as they must live within their means, leading to racialized families having a higher likelihood of living within a neglected community (Adler & Snibbe, 2003; Baig et al., 2009). Both the physical and social environment of the community can have serious negative health impacts, such as exposure to chemicals or emissions, and higher rates of crime and injury (Adler & Snibbe, 2003; Baig et al., 2009). Individuals living with low SES may also experience reduced mental health due to the potential hopelessness of their situation, as low SES is a cyclical problem within society, due to inflation (Adler & Snibbe, 2003). Low SES of racialized individuals is also stigmatized within society, as many don't consider the

historical and cyclical nature of this disproportionate measure (Royne et al., 2016). Aytur et al. (2008) discussed how living in a community that has low SES, can lead to reduced government planning efforts and other such discriminatory practices that prevent the introduction of health promoting opportunities despite the fact that these low SES communities have a higher need for such services. It is explained that urban planning literature largely favours a utilitarian approach to support the largest amount of people rather than those presenting with needs (Aytur et al., 2008). Racialized people can be greatly impacted by this neglect and stigma and are at a higher risk of being overweight or obese, and of having mental health challenges (Baig et al., 2009; Royne et al., 2016). These negative impacts can also be due to more direct forms of discrimination.

2.5.4 Racism and Bullying

Racialized youth experience disproportionate levels of negative social interactions, such as bullying and racism, that directly and indirectly impact their physical and mental health (Roberts et al., 2019). Bullying and racism occurring at any point of one's life can lead to social anxiety and symptoms of depression that contribute to an increased risk of suicidality or engagement in risky behaviours such as drug use, theft, and violence (Pottie et al., 2015). Many of these negative exchanges are committed by peers but can also come from those who are older, or in a position of power (Pottie et al., 2015). Language barriers also have the potential to increase negative communication as they increase the sense of the racialized individual being seen as an outsider (Pottie et al., 2015). This exclusion and blatant negative interactions can lead to increased allostatic load and negative physical symptoms as a result (Roberts et al., 2019). Racism and racial discrimination was actually identified to be a major stressor for youth (Wilson et al.,

2023). This information furthers the need for addressing racism and for increasing protective factors for racialized youth (Wilson et al., 2023).

2.5.5 Violence and Fear

Violence has been found to cause negative physical and mental health (Quam et al., 2020). Exposure to violence and discrimination can be cyclical in nature, with someone witnessing violence and then committing violent acts of their own later down the line (Quam et al., 2020). This exposure increases the risk of injury, incarceration, and substance abuse (Quam et al., 2020). Racialized youth experience disproportionate levels of violence that increase the prevalence of the risks previously mentioned (Calvert et al., 2020; Quam et al., 2020). This violence is found to be rooted in the history of systemic racism and structural oppression that exist to this day (Wilson et al., 2023). The racial stratification and segregation that occurs in North America contributes further to this problem and the cyclical nature of violence (McCrea et al., 2019; Quam et al., 2020; Wilson et al., 2023). This constant experience of violence can lead to symptoms of post-traumatic stress that cause negative health outcomes throughout the lifespan (Wilson et al., 2023). The impacts of this violence, including the risk of injury, incarceration, and substance abuse combined with the isolation and symptoms of depression brought on by post-traumatic stress lead to reduced AT engagement (Quam et al., 2020; Wilson et al., 2023). This is made worse by the lack of supports and services available to youth living within these disadvantaged communities (McCrea et al., 2019).

Police violence is also a factor that impacts the health and well-being of racialized youth, as it is a leading cause of death for Black young men in North America (Calvert et al., 2020). Other racialized groups also experience disproportionate violence at the hands

of the police (Calvert et al., 2020). The over-policing of highly racialized communities and lack of police connection to these communities is seen as a contributing factor for these high levels of police violence (Calvert et al., 2020). Fear and distrust of police was also seen as a contributing factor for increased police violence (Calvert et al., 2020). This fear and distrust has led to the expression “Walking While Black”, which is a double entendre referring to the racial profiling of Black pedestrians and the criminal offence of driving while intoxicated (Roberts et al., 2019). An example of this pedestrian racial profiling can be seen from the death of Trayvon Martin, a black 17-year-old who was walking home after going to the convenience store (Roberts et al., 2019). He was shot by a member of the neighbourhood watch who labeled the youth as a suspicious person (Roberts et al., 2019). Trayvon was engaging in AT at the time he was shot and was carrying a small grocery bag and was talking on the phone using a hands-free earpiece (Roberts et al., 2019). This can clearly be seen as an act of racial profiling and cements the idea that “Walking While Black” is not safe (Roberts et al., 2019). It can be extrapolated that all racialized groups experience a fear of racial profiling and subsequent violence (Roberts et al., 2019). The knowledge that simply walking around one’s community can result in death as a result of racial profiling is a significant barrier to AT engagement.

2.5.6 White Privilege

White privilege is defined as any unearned entitlement or benefit that white people receive solely due to being white (McIntosh, 2003; Sanders, 1999). McIntosh (2003) states that though many would agree that racialized people are disadvantaged, many white people have trouble with stating that they are overprivileged (McIntosh,

2003). This is significant as many racialized people cannot even walk around their neighbourhoods without a sense of fear and apprehension (Roberts et al., 2019). In not recognizing that white people have inherent privileges, racism and discrimination on the basis of race can be further strengthened (Cory, 2021; McIntosh, 2003). The impact of this lack of recognition has greater significance when held by health practitioners and promoters (Cory, 2021). As these practitioners and promoters ultimately work to reduce or prevent the development of chronic conditions, there is a need to understand how risk factors and lived experiences impact racialized people's lives and development of these conditions. There is a need for these health practitioners to unpack and explore their privilege, as they could then be more informed when working with racialized people (Cory, 2021).

2.6 Designing Cities with Racialized People in Mind

As was seen in the previous section, there are several social determinants of health that impact AT engagement and that are unique to the lived experience of being racialized. One of these main factors is that many racialized groups identify with collectivism, where the collective wellbeing is seen as more important than the individual (Jiao & Zhao, 2023). For many racialized people within NS, their collective is seen as their immediate family, unless these people live in areas that are densely populated with other racialized people (Samuel, 2009). Due to the importance of family to racialized people, family dynamics and needs need to be considered when working with these populations, as individual experiences only provide so much context (Jiao & Zhao, 2023).

Within the identity of being racialized, there are many other unique factors that differentiate the lived experiences of different racial groups. The two main categories of racial identity that are featured within this thesis are described below.

2.6.1 African Nova Scotian Experiences

African Nova Scotian people have a legacy in Canada that spans over 400 years (Black Cultural Centre for Nova Scotia, 2024). These individuals largely live across 52 racially segregated communities that arose due to government enforced relocation (Black Cultural Centre for Nova Scotia, 2024). These communities are located all over the province, and are mostly rural, though there are a few African Nova Scotian communities in and around the outskirts of urban areas. These communities were located due to the government wanting to increase agricultural growth within the province and to increase employment opportunities available for white immigrants within urban settings (Whitfield, 2003). This land was poorly selected though as it wasn't even fertile enough to sustain the family it was given to (Whitfield, 2003). This resulted in these families being dependent on the government to meet their basic needs (Whitfield, 2003).

There are 10 such communities (East Preston, North Preston, Hammond Plains, Preston Area, Cherry Brook, Lake Loon, Africville, Cobequid Rd, Windsor Area, and Cornwallis/Horton Area) located around the capital city of Halifax (Beagan et al., 2012; Canadian Museum of History, 2022). As, these individuals and families were historically relocated to these segregated communities, due to systemic racism, they experience a number of challenges related to the social determinants of health. Being pushed to live on the outskirts of society these individuals face challenges due to generational trauma related to war and slavery, low education rates, lack of employment opportunities,

poverty, inconducive social and built environments, as well as barriers to accessing and using the health care system (White et al., 2012).

Despite all these negative factors impacting the health of African Nova Scotians, these populations have remained resilient and have made the best of the resources they had access to. These communities have an increased sense of identity and self, due to their shared values, traditions, and culture (Agrawal, 2015; Beagan et al., 2012). There is also a high social capital experienced as a result of the collectivistic culture and integration that is experienced culturally by these individuals (Agrawal, 2015). With these shared values and identity, African Nova Scotians also credit their resiliency to their spiritual beliefs and religion that led to the creation of churches and leadership structure that were independent from the Nova Scotian government (Beagan et al., 2012; Whitfield, 2003). Spirituality has been correlated with improved mental health and emotional resilience in the face of trauma (Beagan et al., 2012). This is due to the sense of connectedness and a greater sense of community with individuals who share the same beliefs and values (Beagan et al., 2012). It can also mediate the impact of racism and microaggressions, increasing resiliency (Beagan et al., 2012).

2.6.2 Immigrant Experiences

The largest racial groups living within NS identify as Black (34% of all racialized NS) or South Asian (26.1% of all racialized NS) (Government of Canada, 2023).

Excluding African Nova Scotians, all other racialized people within the province are immigrants who are either different generations of Canadian, or are newcomers that might have various statuses such as refugee, immigrant, permanent resident, etc. These individuals have very different demographic characteristics, such as different language

abilities (Government of Canada, 2022). 3030 racialized people within NS cannot speak either English or French (Government of Canada, 2022).

In addition to the general impact of acculturation and how one's culture and values shift and adapt, immigrants can also experience what is known as acculturative stress (Samuel, 2009). This essentially is the culture shock that is experienced due to the differences in the culture of one's home country and that of Canada (Samuel, 2009). This additional stress can lead to the development of mental health challenges (Samuel, 2009). Differences in caregiver and youth acculturation strategies can lead to intergenerational conflict, as one, usually the youth, begins to assimilate to a Canadian identity or integrate both of their identities together, and the other uses a different strategy (Samuel, 2009). These diverging identities that are occupying the same intergenerational home can lead to conflict and family disconnect (Samuel, 2009).

As immigrants move to Canada, they engage in settling in with their new surroundings to create a sense of community and belonging (Chai, 2022). Culturally diverse communities support increased social integration of immigrants (Chai, 2022). Social exclusion and inclusion are also factors that can influence the sense of belonging that these individuals feel (George & Selimos, 2019). Gaining employment was also a factor identified in how a racialized family would engage with their community and their sense of belonging (George & Selimos, 2019). When presented with the opportunity to relocate to a place that has a high population of similar immigrants, they choose to live within these communities due to the shared experiences, language abilities, values, etc. (Chai, 2022). These individuals would also choose to live in an urban setting where possible, though they would move to a rural environment if needed as the benefits of

living within Canada outweigh their position and lived experience in their original community/country (Chai, 2022).

Though there is such wide diversity in the lived experiences and culture of immigrants living in NS, there are some needs that all of these immigrant populations share. Having social supports and connections can improve the immigrant experience as these individuals feel that they belong (Chai, 2022). This can be furthered through programming and community events through which these immigrants are meeting with other community members and building connections (Gallant & Tirone, 2017). Programming that is targeted towards racialized people and is culturally informed builds connected communities where everyone's culture is valued and recognized (Gallant & Tirone, 2017). Communities in NS also need more service providers that are invested in the lives of racialized people, and have the supporting knowledge to work with these individuals to develop upstream approaches to health that promote the wellbeing of immigrants (Gallant & Tirone, 2017).

2.7 Active Transportation Plans in Nova Scotia

The provincial Health Equity Framework was created to guide health practitioners in identifying and working to remove racism and discrimination (Engage for Health, 2024). This framework was developed with and for people who have the lived experience of marginalization (Engage for Health, 2024). Led by three key themes: patient experience, health human resources, and health systems policies and practices, this guide sets out actionable steps that work to address the needs of these vulnerable communities (Engage for Health, 2024). Much needed work and funding is being planned and implemented through this framework to improve the lives of racialized people across NS

(Engage for Health, 2024). The Department of Health and Wellness has been keeping track of progress of all initiatives that this framework has implemented (Engage for Health, 2024).

The Centre for Active Transportation, based in Toronto, created the Mobilizing Justice partnership, which looks to reduce transportation inequities across Canada through evidence-based practice and application (Mobilizing Justice, 2021). Specifically, this partnership is looking to create safer, more inclusive cities for walking and cycling (Mobilizing Justice, 2021). They are also placing focus on decolonizing current climate governance (Mobilizing Justice, 2021). The Anti-Racism Charter in Recreation is a project launched in NS to promote the creation of a more inclusive and representative recreation sector (Recreation Nova Scotia, 2022). It provides the steppingstones for all recreation providers in the province to build upon, by acknowledging racism, providing training opportunities, creating representation, and promoting inclusion (Recreation Nova Scotia, 2022).

Let's Get Moving is a Canada wide initiative that looks to increase PA through a multisectoral focus (Public Health Agency of Canada, 2018). The founding principle of this initiative is that PA is for all people (Public Health Agency of Canada, 2018). Strategies that support working towards this goal are spread between six focus areas: cultural norms, spaces and places, public engagement, partnerships, leadership and learning, and progress (Public Health Agency of Canada, 2018). Let's Get Moving NS is an action plan that aligns with the federal initiative and is working to get Nova Scotians to move more everyday (Province of Nova Scotia, 2018). The goals of Let's Get Moving NS are to redefine movement, reach Nova Scotians where they learn, work, and access

health care, advance quality community leadership, enhance opportunities and address inclusion, and to measure the progress (Province of Nova Scotia, 2018). This initiative has sparked the creation of the Make Your Move public engagement and awareness campaign.

Make Your Move is an initiative funded by the Nova Scotia Department of Communities, Culture, Tourism and Heritage with support from the Healthy Tomorrow Foundation (Healthy Tomorrow Foundation, 2023). Through this initiative, four communities across NS were chosen to receive funding and support to create a shift and motivate more people to increase their movement (Healthy Tomorrow Foundation, 2023). These four communities include Antigonish County, the Town of Lockeport, Wagmatcook First Nation, and the Municipality of the District of Yarmouth and Town of Yarmouth. This Make Your Move project is being evaluated by researchers at Dalhousie University with the Communities on the Move (CoM) Evaluation to determine if the Make Your Move model is increasing movement, and whether it should be replicated across the province.

2.8 Gaps in the Literature

Within NS, policies have begun to include the unique needs of racialized people, as can be seen from the Anti-Racism Charter in Recreation (Recreation Nova Scotia, 2022) and Health Equity Framework (Engage for Health, 2024). These policies are specifically working to increase inclusion and access. Policies and initiatives working to increase AT in NS haven't included additional considerations for all racialized people (Province of Nova Scotia, 2018). The Let's Get Moving initiative has made

considerations and is working to connect with newcomers and African Nova Scotians through this thesis (Province of Nova Scotia, 2018).

There is a lack of evidence-based practices and qualitative research on the lived experiences of racialized youth, as many of the structures and systems within Canada are tailored for white youth (Bosch et al., 2019). This furthers the health inequities that racialized youth live with, as there aren't resources available that support their unique physical and mental health experiences (Bosch et al., 2019). There is a need for services to be tailored for this population over the majority due to the inequities experienced in health status (Bosch et al., 2019). In sharing the voices of racialized youth and their caregivers, we can better understand these unique lived experiences and develop culturally informed strategies and interventions that will reduce their risk of developing chronic health conditions.

2.9 Summary

This chapter has presented the growing body of literature regarding the need for increased access and engagement to AT, and the impact that a racialized identity can play in engagement. As youth PA behaviours can impact not only health during one's youth, but lifelong health, the need to ensure that children are being active is amplified. Racialized youth, due to the increased risk of developing chronic health conditions have an increased need to engage in PA. These youth also have an increase in factors that may impede their access to AT engagement, such as acculturation, SES, racism, violence and fear, white privilege, acculturation, and collectivism that need to be considered when trying to create interventions and supports for this population. The context of living in

NS, the specific racial groups living within the province, and the policies or frameworks that are working to increase AT engagement must also be considered.

Therefore, the objective of this thesis is to explore the AT engagement of racialized youth living within NS from the perspective of the youth and their caregiver. Specifically, using qualitative methodology, I examined barriers and enablers to AT for racialized Nova Scotian youth. A hermeneutic phenomenological research design supported the deep understanding of this lived experience. Additionally, there is the potential to inform the creation of culturally specific interventions or strategies working to increase AT among racialized youth. The next chapter will further discuss this research design, the theoretical framework that is the backbone of this research, data collection materials and processes, and the analysis plan.

Chapter 3: Methodology

This qualitative study aimed to explore the lived experiences of racialized NS youth with AT. This was done by identifying self and caregiver perceived barriers and enablers that impact these youth's access to AT. The dyadic aspect of this study supported an understanding of the impact of acculturation differences between generations, as well as the differences in perspectives between a child and their caregiver. This research also collected ideas and strategies on methods that could be effective in increasing AT with racialized youth living in NS. The narrative approach further supported in providing context on the different types of strategies that would best support families that have different unique characteristics. This chapter describes the study methods used within this research, detailing the qualitative approach used as well as the theoretical models framing this work. Further described are the participant inclusion criteria and recruitment strategies, ethical considerations taken, data collection methods and instruments, and analysis strategy used within this thesis.

This thesis was a qualitative study that collected primary data for the purpose of exploring how racialized youth engage with AT. The aim was to identify potential barriers and enablers to AT faced by these youth. These findings may inform culturally responsive AT strategies within the HRM and across NS more broadly. To meet these aims, the following research questions were asked:

1. What are self and caregiver-perceived barriers that obstruct racialized youth from engaging in AT?
2. What are self and caregiver-perceived enablers that support racialized youth in engaging in AT?

3. What are potential strategies recommended by racialized people that could increase racialized youth AT?

3.1 Context

As previously stated, improving AT has been identified as a leading strategy to improve children's PA and overall health and wellbeing (Roberts et al., 2019). Due to this and due to increasing levels of sedentary behaviour within the province, NS has implemented AT initiatives that are working towards improving the built environment and programming to increase AT engagement throughout the HRM. This thesis presents the lived experiences of racialized youth and their caregivers with the goal of informing these AT strategies so that they are effective in reaching this vulnerable population.

3.2 Conceptual Framework

3.2.1 Philosophical Worldview

A worldview is a philosophical orientation or framework through which the researcher approaches and conducts their work (Creswell & Creswell, 2018). Also referred to as a paradigm, ontology, or epistemology, it outlines a directed scaffolding of assumptions, questions, methods and, procedures (Rossman & Marshall, 2016).

This research was guided by a constructivist worldview, which looks to construct a foundation of knowledge that allows for a better understanding of a phenomenon being studied (Creswell & Creswell, 2018; Rossman & Marshall, 2016). Within this worldview it is understood that people have the ability to control how they act within any situation, and that it takes a constructive process to understand the reasoning behind the way that people conduct themselves (Gerstenmaier & Mandl, 2001). In a research context, this approach looks first at individual participant's experiences before breaking down the

thought processes behind these experiences, from which understanding and knowledge can be gained (Gerstenmaier & Mandl, 2001). This exploratory nature of constructivism aligns with the phenomenological approach by gathering primary data on the lived experiences surrounding a situation being studied (Creswell & Creswell, 2018).

Social constructivism specifically is the worldview that informed this thesis, as it places focus on understanding how individuals experience the world as a result of social interactions and knowledge shared among population groups (Gerstenmaier & Mandl, 2001). Within this worldview, researchers can begin to break down the experiences of marginalized groups and participants can better understand the social world they live within and the subjective meanings that they have attributed to experiences and the things around them (Creswell & Creswell, 2018). Research designs within social constructivism are inductive, as the researcher works with the participant to use lived experiences and the subjective meanings attached to develop an understanding of a phenomenon (Gerstenmaier & Mandl, 2001). Using a social constructivist worldview within this thesis allows the opportunity for developing an understanding of how racialized youth in NS engage with AT, and what factors impact this engagement.

3.3 Study Design

Qualitative research, being centered on understanding the lived experiences of people, allows for a rich and open exploration of how different groups of people situate themselves around social issues (Creswell & Creswell, 2018; Rossman & Marshall, 2016). In collecting primary source data, a researcher can begin to understand and interpret the subjective experiences of others (Reid et al., 2017). When looking to understand the experiences of racialized people, qualitative approaches allow for depth in

understanding the impact of a phenomena on difference racial/cultural groups (Rossman & Marshall, 2016). This study used a qualitative design to understand the experiences of racialized youth with accessing and engaging in AT from both the caregiver and the youth.

The qualitative approach employed within this thesis was a phenomenological research design. Phenomenology looks at the lived experiences of individuals or groups on a specific subject matter that is being studied (Creswell & Creswell, 2018). There are seven types of phenomenology, transcendental constitutive, naturalistic constitutive, existential, generative historicist, genetic, hermeneutic, or realistic, which all look at how certain things are experienced by people (Embree et al., 1997).

This thesis specifically used a hermeneutic phenomenological approach, which is a method that is focused on understanding how a specific phenomenon is experienced by an individual or group (Creswell & Creswell, 2018). It is an interpretive approach as the methods are driven by seeking to understand deeply how this phenomenon is perceived, felt, remembered, and made sense of by these individuals (Matua & Van Der Wal, 2014; Rossman & Marshall, 2016). The phenomenon being studied within this work was racialized children's experience engaging with AT. This design was chosen due to its focus on identifying an essence or themes that may be present within racialized children's experiences with AT (Rossman & Marshall, 2016), as well as to look at the socio-cultural context and how it is shaping these children's access and engagement with AT (Matua & Van Der Wal, 2014). In understanding the complex factors that impact access to AT, health promotional strategies can be developed and implemented to address these factors and increase children's access to AT.

Though the descriptive component of this research design is important and provides insight into how the phenomenon is experienced, the hermeneutic approach provides that deeper exploration of the experience and potential implications for practice (Matua & Van Der Wal, 2014). This is done through interpretations based on the complexity and detail of the participant's life experiences shared during data collection (Neubauer et al., 2019). The researcher's own life experiences impact this interpretation, as they are looking to understand the unsaid meaning or essence behind the participant's experiences (Neubauer et al., 2019). The combination of the data, researcher experience and understanding, and the existing literature on the topic allow for a shared meaning-making that takes into account the complex nature of the human experience and all of the contextual factors that impact that experience (Matua & Van Der Wal, 2014). These interpretations can be used to inform the development of AT programs or interventions that are tailored to the complex life experience and needs of racialized children in NS.

3.4 Theoretical Framework

The SEM (McLeroy et al., 1988), informed by Critical Race Theory (Ford & Airhihenbuwa, 2010), was used to inform this interpretive qualitative research study. Combining the SEM with Critical Race Theory allowed for a multi-level understanding of the contextual factors impacting racialized children in NS's engagement with AT, with an attentiveness to the fact that race can be one such factor that leads to inequities (Ford & Airhihenbuwa, 2010).

3.4.1 Critical Race Theory

A critical race lens presented the opportunity to critically examine racialized youth's lived experiences with AT and identify how racism, structural and otherwise,

may contribute to inequities in access to AT (Ford & Airhihenbuwa, 2010). The main premise behind Critical Race Theory is that our society is fundamentally racially stratified, with those who identify as racialized experiencing inequities and oppression due to that identity (Hylton, 2012). Critical Race Theory works to use theory, experiential knowledge, and critical consciousness to challenge structural racism (Ford & Airhihenbuwa, 2010).

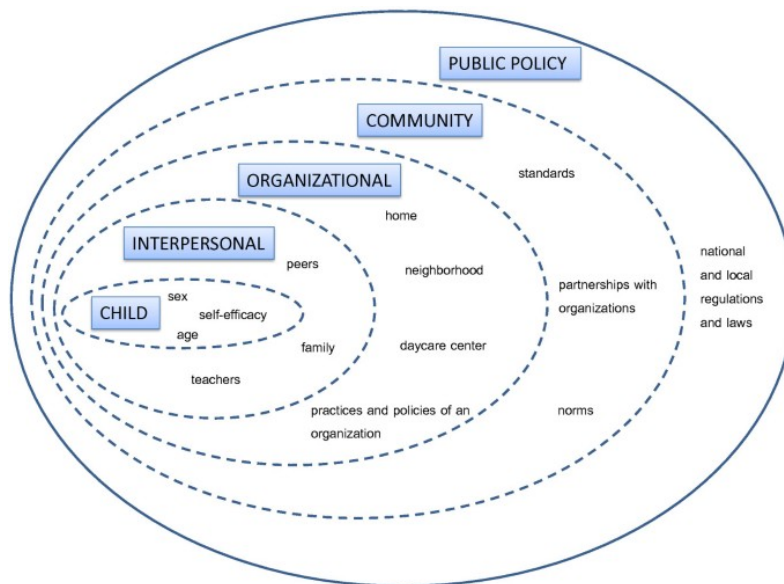
As contemporary racism is so deeply ingrained within society, it has become socially normative and ordinary (Ford & Airhihenbuwa, 2010). Daily racist microaggressions or experiences with structural racism can influence behaviour and attitudes without conscious recognition (Ford & Airhihenbuwa, 2010). In employing Critical Race Theory, such factors can be identified and challenged while also empowering racialized people (Hylton, 2012). In changing one's perspective towards the idea of "centering in the margins" (Ford & Airhihenbuwa, 2010, p. S31), the voices and perspectives of marginalized groups are positioned to be the central position of a topic. This idea was operationalized in this thesis by centering racialized voices within the issue of access to AT. It was understood that this inequity in access is a result of systemic and historic racism that has impacted the lives of racialized people living within Canada. The researcher practiced critical self-awareness and reflexivity to ensure that this fact was recognized and considered when developing all interview materials and analysis strategies. During the interviews, the tailoring of the materials to fit within Critical Race Theory supported in placing the focus on participant's experiences and minimized the creation of power imbalances that would impact the building of trust between the researcher and the participants. When conducting the analysis, the researcher also

considered the impact of this systemic racism, which is explained further in chapter 5 of this thesis.

3.4.2 *Socioecological Model*

The SEM is a framework that acknowledges the multi-level and complex factors that influence individuals (Kilanowski, 2017). This model, created by Bronfenbrenner (Bronfenbrenner, 1977) was originally used to understand human development. It was later adapted by the Centers for Disease and Prevention into a five-level model that included the concentric spheres of policy, community, organizational, intrapersonal, and the individual to develop health promotional programs (see figure 1) (Kilanowski, 2017). The SEM presents the view that the interactions between the five spheres determine an individual's behaviours and health (Kilanowski, 2017). This understanding of the interconnected and widespread factors that can impact health behaviours were used to identify the factors that influence AT engagement by racialized youth.

Figure 1: Socioecological Model of Health



Note. From, “A socioecological approach to physical activity interventions in childcare: A systematic review” (Mehtälä et al., 2014). Retrieved from <https://doi.org/10.1186/1479-5868-11-22>

Within the SEM, policy is placed in the outermost level, moving inwards with the community, organizational, intrapersonal, and individual levels (Kilanowski, 2017). The policy level deals with the local, provincial, and national laws and policies of an area (McLeroy et al., 1988). This level holds great significance within this study as both provincial and national Let’s Get Moving plans are focused on making improvements to both infrastructure and systems with the goal of increasing access to AT engagement. This study focused primarily on how these plans were being implemented throughout the HRM, which connects with the community level of the model. This level looks at the relationships between organizations and institutions, between one’s social network, and at how community power structures influence individuals and each other (McLeroy et al., 1988). Research participants were asked how accessible AT engagement was in their specific communities, and to see if they had noticed any changes to that access that could be attributed to the AT plan being implemented within the municipality. The organizational level considers how social institutions within the community impact people, such as schools, day care programs, and the like (McLeroy et al., 1988). As AT is defined as human-powered travel from one destination to another, children’s method of travel to and from school or extracurricular activities was a focus of this study. Factors that impacted one’s form of travel were also considered. The intrapersonal level places a focus on the formal and informal networks and social support systems that one might have (McLeroy et al., 1988). Within this thesis, this level focused on the close

relationships that children have, such as those with their caregivers and other immediate family, as they play significant roles in the lives of youth. To ensure that this level of the model was considered, a dyadic analysis was used by both considering the perspective of the youth as well as that of their caregiver. Finally, the individual level considers an individual's own attributes, such as their knowledge, beliefs, and views (McLeroy et al., 1988). Here we considered the history, knowledge base and attitudes of the youth, as well as those of their caregiver to see how different generations access AT and to see if there is a difference in the factors that impact their AT access.

Using the SEM as a framework for this study supported in identifying the different factors and interactions that impact racialized youth's engagement in AT. Exploring the factors that were identified within these five levels presented valuable insight into strategies that can be used to increase AT engagement in racialized youth living within NS and could inform the creation of interventions that are working towards increasing access. This layered approach to analysis also supported the implementation of Critical Race Theory as the focus was placed first on the societal factors impacting these youth, before moving inward through the SEM to the youth and their caregiver. The impacts of systemic racism on AT access were highlighted as a result of this approach.

Employing the SEM with Critical Race Theory as an iterative methodology provided the framework through which the lived experiences of racialized youth were explored within this thesis. The SEM was used to look at the different levels through which health and behaviours are influenced, while also recognizing and placing focus on the ways in which racial identity can play a role within these levels and within society at large.

3.5 Research Participants

Due to this study having human participants, an ethics application was submitted to the Dalhousie University Research Ethics Board (REB). This application was approved in October 2023 and an additional amendment was approved in January 2024. The letter of approval from the Dalhousie REB (REB 2023-6741) can be found in Appendix A.

This study included racialized children and their caregiver (dyads or triads). All participants had to have lived within NS for a minimum of one year before the date of their interview. English fluency skills that would enable participation in an interview without the support of a translator were also required.

To be included in the study, children had to self-identify as racialized and be between the ages of seven and fifteen years old. The minimum age of seven years is commonly used for AT studies as this is when children typically begin to engage in increased levels of independent transportation (Larouche et al., 2023). The upper age limit of fifteen years old has been selected as it is the age where children are still engaging in human-powered AT as their primary source of transportation (prior to acquiring a driver's license). As mentioned previously, being racialized will be operationalized as meaning any non-Indigenous person who is non-Caucasian racially and doesn't identify as white in colour (Statistics Canada, 2022). To be included in the study, caregivers must have been the primary caregiver of their participant child for at least a year before their interview.

3.5.1 Recruitment

Purposive and subsequent snowball sampling were used to recruit caregiver and child dyads. These recruitment strategies were chosen as purposive sampling defines a specific group within society to include within the sample (S. Campbell et al., 2020). Within this thesis, racialized children and their caregivers were identified to be the bounds of this sample. Subsequent snowball sampling was used as racialized populations have reduced trust regarding research participation. Hearing about the study from their peers could increase this trust as they can be given reassurance about what the research process entails. Additionally, as I am not a member of a racialized community within NS, purposive and subsequent snowball sampling were decided to be the best approaches for this recruitment.

Initial recruitment efforts were focused on three of the communities involved in the CoM evaluation project, as this thesis was aligned with that work. A recruitment poster (Appendix B) and information sheet (Appendix C) were circulated by the Municipal Physical Activity Leader (MPAL) from each of the communities. This was done by posting the recruitment poster in high traffic areas throughout each community, and circulating recruitment materials through local social media pages, at community events, through newsletters, etc. Recruitment was attempted with these methods for two months, though there wasn't any uptake. Due to this and the challenge of relying on a third party to support local recruitment efforts an ethics amendment was submitted and accepted to revise the inclusion criteria to include those living anywhere throughout NS. This amendment enabled me to circulate the recruitment materials myself. This was done

by going into local community centers, reaching out to groups that have connections to racialized people, and posting the materials in high traffic areas of the community.

3.6 Ethics and Ethical Considerations

As this study had human participants, there was a deep need to ensure that all methods were conducted and planned in an ethical manner to not harm these participants or the larger community. Though there weren't any anticipated risks connected to participation, an ethics application was submitted for approval from the Dalhousie University Research Ethics Board (REB). This application was approved in October 2023 and the aforementioned amendment was approved in January 2024. The letter of approval from the Dalhousie REB (REB 2023-6741) can be found in Appendix A. Additionally, a resource sheet was created and sent out to all participants detailing available physical and mental health supports available for racialized people living within NS.

3.6.1 Informed Consent and Withdrawal

Informed consent was collected from participants through both a verbal consent at the beginning of the interview, and through signed consent forms (Appendix F and G). The consent forms (child and caregiver) outlined a detailed description of what participants could expect from taking part in this study, the purpose of the research, their right to withdraw, potential risks associated with participation, reimbursements, how participant privacy will be ensured, and any conflict of interests. Participants were informed that they were able to withdraw their consent and have their data removed from this study up to two weeks after their interview had taken place. They could do so through email contact with the lead researcher.

3.6.2 *Privacy and Confidentiality*

All participant contact occurred through email communication, phone call (to ensure participant eligibility), virtual call (Microsoft Teams), or in-person. All phone calls and in-person interviews were conducted in a closed office space located at Dalhousie University. All interviews that occurred virtually were conducted by the researcher in a private location, and interview participants were advised to move into a private location if they were able, though not all were able, due to limited space or caregiving responsibilities.

Transcripts were de-identified, and all participants were assigned a participant number as a pseudonym so that participant confidentiality could be maintained. Each dyad is identified by the same participant number, e.g. child 1 and caregiver 1 are a paired dyad. De-identified direct quotes from participants were used to support the description of thesis results presented in Chapter 4. After being transcribed and de-identified, all audio files were deleted. Study data including transcripts and signed consent forms were stored in a protected folder within Dalhousie University's secure Microsoft Teams, accessible only by the lead researcher and her supervisor. These data will be destroyed seven years after the completion of this study.

3.7 Measures

3.7.1 *Interview Guide*

Two semi-structured interview guides (Appendix D and E) were created to support open-ended data collection with participant caregivers and children. The development of these guides was informed by Critical Race Theory through the recognition that systemic and historic racism has impacted access to health promotional

activities, though this fact often is not recognized. Interviews started by reaffirming consent and ensuring that participants were adequately informed about all aspects of their participation in this thesis. Participants were also advised that they could skip questions or end the interview early if they ever felt uncomfortable simply by informing the researcher. Interviews with both participant caregivers and children first focused on one's individual engagement with and values regarding AT and PA. Caregiver interviews also explored their perspectives on their children's engagement with AT and PA. Next, participants were asked about strategies or ideas they had for increasing access and engagement in AT and if they had heard of or had experience with any initiatives working to increase PA and AT. More extensive demographic questions were then asked at the end of the interviews to better characterize this sample population and the families that took part in this work. Additionally, as caregiver interviews were conducted first, each caregiver was asked to relay any information that could support the researcher in interviewing their child/children, so that each child's interview could be tailored to their individual needs and preferences.

Due to the large time commitment involved with participation, adult supervision of the participant child was offered if needed during any caregiver interview that took place in person. This was supported by a member of the research team who had completed a recent criminal record check and recent vulnerable sectors check.

3.7.2 Reflexive Journal

A reflexive journal was kept to document researcher thought processes, questions, and interpretations for further reflection (Braun & Clarke, 2022b). This journal included additional context on the format and process of each interview, my initial thoughts on

themes, tips for future interviews on how to improve my delivery and facilitation, and my thoughts on the interview questions, specifically if they changed at all during this process. This journal was a physical notebook that was kept by the researcher throughout data collection and analysis of this thesis. Identifiable participant information wasn't recorded within this journal. Participants were simply identified by their participant number to ensure that confidentiality was maintained.

During analysis, this journal was helpful in coming back to my previous thoughts and remembering how I perceived participant experiences. These thoughts and reflections were supportive in recognizing the different narratives that were coming out of the interviews. The information included within this reflexive journal was used to develop the meta-stories as similar thoughts and reflections were being found across the different dyads. From this base development of the meta-stories, I was able to go back to the interviews themselves to fully flesh out the description and content of the meta-story to ensure that they were reflective of the participant experiences. The reflexive journal was supportive of the interpretive nature of this qualitative analysis as it allowed for deeper researcher reflexivity.

3.8 Data Collection

Caregiver and child dyads participated in individual one-on-one 60–90-minute semi-structured interview in-person at Dalhousie University or through Microsoft Teams software conducted by the lead researcher. Interviews were audio-recorded to aid with transcription, and caregivers were asked if they would like to clarify any data or if they would like to receive their transcript to check for accuracy (member checking). If they said yes to member checking, their response was required within two weeks following

their receipt of the transcript. Transcript were edited and/or revised based on this feedback from the participants. Participant children were asked additional clarifying questions throughout their interview to support accuracy in place of member checking. Entries were also made in a reflexive journal during and after interviews to support the understandability and provide context for each interview. After each interview, participants were each given a \$25.0 electronic gift card as an honourarium to thank them for their time and support of this work.

3.8.1 Data Storage

Participant lived experiences connected to their race and AT engagement were collected, along with demographic data, and signed consent forms. All study data was stored in a protected folder within Dalhousie University's secure Microsoft Teams, accessible only by the lead researcher and her supervisor. These data will be destroyed seven years after the completion of this study.

3.9 Data Analysis

Interview data were analysed using two analysis methods, the Framework method adapted for use with reflexive thematic analysis (RTA), followed by a narrative analysis that developed contextualizing meta-stories. The Framework method is described first, followed by an explanation of how it was adapted to be used with RTA. Secondly, the narrative analysis is described with an explanation of how meta-stories were developed to help contextualize the study findings.

Data for analysis included transcripts and entries from the reflexive journal related to each interview. NVivo 1.7.1 (Lumivero, 2023), a qualitative data analysis software program, was used for data management, coding, and to support the generation

of themes within this thesis. Microsoft Teams was also used to support transcription by providing the first draft of the transcript, which the researcher read through to ensure accuracy and to remove all identifiable information.

3.9.1 Framework Method

The Framework method was developed by Ritchie and Spencer (2013). It is an analysis method that is able to be used with other qualitative analysis methods, with the purpose of enabling a dyadic form of analysis (Ritchie et al., 2013). This is due to the focus placed on individual or grouped views to allow for comparing and contrasting data (Gale et al., 2013). This dyadic analysis can be adapted to be used with approaches like reflexive thematic analysis (RTA) by adding an additional stage of developing a matrix that allows the researcher to analyze and develop themes without losing the context of individual perspectives within and among dyads (Collaço et al., 2021). For this thesis, the Framework method was mapped on to RTA.

3.9.2 Reflexive Thematic Analysis

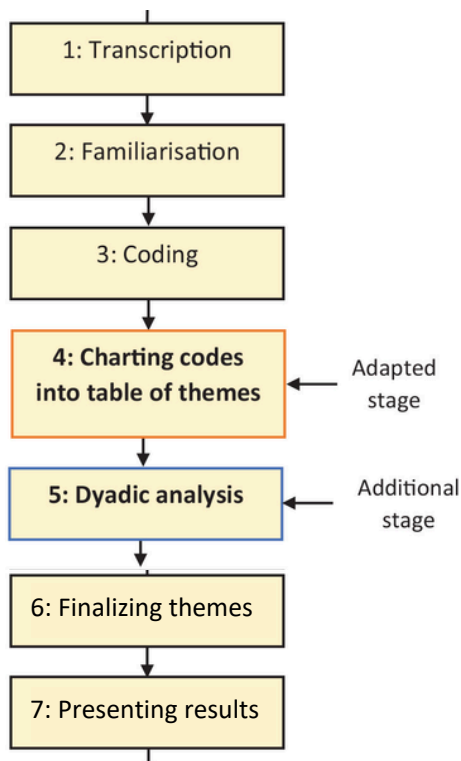
RTA is a form of qualitative data analysis developed by Braun and Clarke (Braun & Clarke, 2006), that identifies themes within an interview dataset. RTA is flexible as it can be conducted with either a deductive or inductive approach to coding (Braun & Clarke, 2006). This analysis used inductive RTA as it aligned with the hermeneutic phenomenological approach and constructivist worldview employed within this thesis, as the main goal of constructivism is to build a foundation of knowledge (Creswell & Creswell, 2018). Researcher lived experiences, thoughts, and subjectivity are taken into account and valued within inductive RTA and support interpretation of the data (K. Campbell et al., 2021). Within this approach, codes and themes are progressively defined,

and a pre-structured codebook isn't used as it could limit the depth of engagement and interpretation that the analysis could achieve if preconceived codes are used (K. Campbell et al., 2021). There are six phases within inductive RTA: familiarization, coding, generating themes, developing themes, refining, and defining themes, and writing (Braun & Clarke, 2022b). Though these phases may seem to follow a linear path, it is important to note that researchers often have to return to previous steps, reanalyse and shift data around due to the inductive nature of this analysis (Braun & Clarke, 2022a). These phases, as applied within this thesis will be described in the next section on the Framework method.

3.9.3 Applying the Framework Method with Reflexive Thematic Analysis

Within this thesis, the Framework method was mapped on to RTA which resulted in six phases of analysis: familiarization, coding, charting codes into a table, dyadic analysis, finalizing themes, and presenting results. The following describes how this approach was used within this thesis.

Figure 2: Adapted Dyadic Analysis Using the Framework Method



Note. Adapted from, “Using the framework method for the analysis of qualitative dyadic data in health research” (Collaço et al., 2021). Retrieved from

<https://doi.org/10.1177/10497323211011599>

- 1. Familiarization with the data:** The first step of inductive RTA is to become familiar with the data, this is an important first step as codes and themes cannot be identified inductively without knowing the data well (Braun & Clarke, 2006). Interview data was audio recorded and transcribed using Microsoft Teams software. This transcript was then edited by the researcher to ensure accuracy. Participant caregivers were also given the opportunity for member checking to ensure that their thoughts and opinions were reflected authentically. Transcripts were re-read before the coding process began and

additional notes were made in the reflexive journal about potential codes and themes within the data.

- 2. Coding:** Next, the researcher generated codes from the data, essentially organizing bits of data together (Braun & Clarke, 2006). Coding involved deeply reading and labeling important pieces of data within the transcripts (Braun & Clarke, 2022b). These codes in essence are puzzle pieces that when put together with other codes can create themes within the data (Braun & Clarke, 2022b). This process was inductive, as the codes came out of the data and were purely driven by the content of the transcripts (Braun & Clarke, 2022a). As new codes came up throughout the process and when analysing other transcripts, the researcher went back and re-coded transcripts based on these new codes that were identified. All 18 transcripts were coded inductively by the researcher using NVivo software (Lumivero, 2023). Transcripts were coded systematically, as first the caregiver's transcript was coded, and then their child's to support the dyadic nature of this analysis. Notes were made in the reflexive journal to support the development of themes during the dyadic analysis.
- 3. Charting codes into a table of themes:** Code clusters were then created based on the research questions and theoretical frameworks used within this study. Codes were mapped into themes using sticky notes to support researcher reflexivity and to align with the theory and research. These clusters of similar concepts led to the development of initial themes. These themes which presented patterns of information from multiple different perspectives

(Braun & Clarke, 2022a) were then charted into a table to prepare for the dyadic analysis. This table was organized based on themes and then codes within those themes. Data were listed in the table based on dyad so that the dyadic analysis could be conducted, and additional themes could be created from the dyadic perspectives.

4. **Dyadic analysis:** Themes were refined based on comparing and contrasting the bits of data for each dyad displayed in the table of themes. This was done by looking at the differences between caregiver and child data. This theme development was further supported by Dr. Sarah Moore, the thesis supervisor on this project. The analysis process was discussed in depth and codes were again physically mapped out using index cards to ensure that the research questions and theoretical frameworks were guiding the analysis (Appendix J). Themes were expanded upon and researcher confidence in the analysis greatly increased.
5. **Finalizing themes:** In this phase of the analysis, all the themes were fully named and defined. This involved a discussion with Dr. Moore where we discussed the definition of each theme and brainstormed names that fully encompassed the concept the theme was centered within. Additionally, participant quotes that further reflected each theme's meaning and interpretation were identified to support the understandability of the findings.
6. **Presenting results:** This last phase of the analysis encompassed the writing and integration of the findings in this thesis. Within this stage, the researcher used the visual map of the themes (Appendix J) and determined the best

narrative layout for these results and interpretive discussion. Again, the research purpose, questions, SEM and Critical Race Theory were all reflected upon during this process. The quotes identified in the previous stage were further narrowed down to a few quotes that best reflected the experiences of racialized youth's engagement with AT and best represented the themes. These themes are displayed in Chapter 4 of this thesis and expanded upon further in Chapter 5.

3.9.4 Narrative Analysis: Generating Meta-Stories

Narrative analysis is a type of qualitative data analysis that focuses on interpreting experiences and motivations to better understand the underlying narrative (Riessman, 2008). In being able to interpret and understand the underlying narrative of how racialized youth engage with AT, more insight was able to be gained to inform AT strategies that can increase AT engagement. This insight was presented in the form of meta-stories, which are narrative descriptions of the distinct stories that present the different family dynamics that were found within this analysis.

This narrative analysis and the defining of meta-stories were incorporated into this work due to the diversity of the research participants and the need for adding further context to the thesis findings. Context was found regarding the strategies that should be used to increase AT access for the different types of families that were found within this work. The narrative analysis used within this thesis was inductive, as first information within the reflexive journal kept indicated the presence of different family dynamics that impact AT access. From this first realization, the codes that were organized within phase three of the Framework method, as described above, were analysed to identify and define

these unique family dynamics. Three such distinct narratives were identified within this dataset. These narratives were then defined and written out as narratives that can be transferred or generalized as hypothetical racialized families seen within NS (Paterson et al., 2023), leading to different strategies being used that would best support these families in engaging with AT.

3.10 Quality Considerations

As this work is framed within a constructivist worldview, it's important to ensure that quality data analysis has been conducted as these results form the foundation of knowledge on racialized children's engagement with and access to AT. To assess the quality of this analysis, Braun and Clarke's (Braun & Clarke, 2022b) 15-point checklist has been followed. Though the 15-point checklist was created to support RTA, the Framework method that was used within this thesis was adapted to be used with RTA and is a method of thematic analysis, so this checklist can still be applied. Though this checklist is a measure to check the quality of the thematic analysis, Braun and Clarke (Braun & Clarke, 2022b) stress that thoughtful and reflexive engagement with the analysis are crucial to ensure the quality of the findings.

In addition to reflexivity, theoretical knowingness is also discussed as a component to quality thematic analysis (Braun & Clarke, 2022b). Theoretical knowingness is defined as, "the practice of engaging with and deploying theory deliberately and reflexivity in our research" (Braun & Clarke, 2022b, p.268). As the theoretical framework of this study is informed by the SEM and Critical Race Theory, these theories were incorporated and deployed in all stages of this thesis, from the development of the interview guide to the development of themes. Being reflexive,

researcher interpretation and participant voices were central components within this analysis that added value to the theoretical framework.

As previously mentioned, a reflexive journal was kept throughout this thesis to document the researchers thought process throughout planning, data collection, and analysis. Due to this journal, a focus was placed on ensuring all aspects of this work were aligned with the theoretical framework and original purpose. This journal was also helpful with connecting with my committee and my supervisor as I was able to share my thought process and decisions easily and was able to get advice from these more experienced researchers. It was also very valuable to get additional opinions and perspectives from these women who all have diverse experiences and perspectives. It allowed for an increased depth to my analysis.

Additional time was taken during the analysis of the interview data to ensure that I was satisfied with the depth and accuracy of the findings, resulting in a higher quality result and delayed presentation of these findings. This increased time allowed for improved reflexivity and thoughtful analysis. I was able to complete the analysis without feeling rushed and develop quality themes and findings from the data, while still getting support and constructive criticism from my committee. I also had the time to read other theses and other existing research work that utilized a dyadic analysis method. This further increased my confidence in the findings of this thesis and my approach to analysis.

In addition to the checklist, quality and rigor was also assessed through four principles: credibility, transferability, dependability, and confirmability (Creswell & Creswell, 2018). Credibility is a measure of how aligned the study is with its original

purpose and the true experiences of the participants (Creswell & Creswell, 2018). This was addressed through member checking, asking clarifying questions throughout the interview, as well as coming back to the research questions often to ensure that they formed the central ideas within this study. Transferability relates to the ability of these findings to be transferred to other settings or situations (Creswell & Creswell, 2018; Johnson et al., 2020). Transferability was supported by the large and diverse sample of children and caregivers who were recruited for this study through purposive sampling (S. Campbell et al., 2020). While efforts were made to ensure transferability is possible, the unique history of African Nova Scotian people's ancestry in Canada could limit the transferability of these findings. Dependability refers to how replicable and consistent the study findings are (Creswell & Creswell, 2018). The clear and descriptive documentation of study methods and procedures support the dependability of this work. Finally, confirmability ensures that researcher influence and biases on the study are minimized (Creswell & Creswell, 2018; Johnson et al., 2020). As I discuss in my position statement, I have considered the many different factors that impact my thoughts and beliefs. I have worked with my supervisor and used my reflexive journal to ensure that the voices and experiences amplified by this thesis are those of my participants, and not my own. I was able to use my own lived experiences to increase confidence in the accuracy of my results, but in situations where my experiences didn't align with those of my participants, I ensured that I looked at context and asked additional questions to gain further insight into the participant's lived experience and thoughts. Overall, these measures of quality and rigor have increased my confidence in this thesis and the results they present.

Chapter 4: Results

This chapter presents the findings from this thesis, starting with a summary of the dyads who participated in this work and their movement behaviours, followed by descriptions of the three themes found through the dyadic analysis. The experiences and perspectives of these racialized children and their caregivers have been depicted below, amplifying the voices of these individuals who have been historically marginalized within Canada. Findings are presented with researcher reflexivity in mind, and direct participant quotes are used to accurately depict these lived experiences.

4.1 Participant Demographics

A narrative description of participant demographic data is shared below, with any identifying personal information having been removed to maintain participant confidentiality. A total of eight caregiver and child dyads/triads participated this study; two triads were included as the researcher and their supervisor found it unethical for caregivers to have to choose which child participated if there was more than one child who fit the inclusion criteria. Interviews with caregivers lasted 35 minutes on average, with a range from 20 minutes – 74 minutes and interviews with children lasted 23 minutes on average with a range of 18 minutes – 45 minutes. Interviews occurred mostly online through Microsoft Teams, though one dyad chose to participate in-person instead. All dyads lived within the Halifax Regional Municipality (HRM), though there was a mix of those living within rural communities and those living within urban communities.

8 families were included in this work. Youth identified as boys (n=5; ages 9-14 years) and girls (n=5; ages 8-15 years). Caregivers (n=8; ages 36-51 years) included 5 mothers, 2 fathers, and 1 grandmother; all identifying as a primary caregiver of their

participant child/children. Respondents identified as African Nova Scotian, Black, South Asian, or of mixed racial descent. Five dyads/triads included individuals who immigrated to Canada within the last decade, two dyads/triads identified as African Nova Scotians, and the caregiver and child dyad/triad identified as second generation and third generation immigrants respectively.

Participants shared information on their PA and AT engagement in regard to Canada's 24-Hour Movement Guideline's (Canadian Society for Exercise Physiology, 2021) and provided additional context by describing some of the activities that they take part in. Participant knowledge about these 24-Hour Movement Guidelines was also assessed, with caregivers being asked about the guidelines for both theirs and their child's age groups. Of the 18 adults and children interviewed, only one participant child was able to relay the guidelines for their age group, though most participants stated that it is important to know what these guidelines recommended.

Four participant caregivers stated that they met the guideline of engaging in 150 minutes of moderate to vigorous PA per week. The remaining four cited barriers such as injury, parenting young children, and work responsibilities preventing them from meeting the recommended activity levels. The weather was additionally referenced as a factor impacting PA levels, and that movement typically increased over the spring and summer months. All ten participant children stated that they met the guidelines for engaging in at least 60 minutes of moderate to vigorous PA per day, though four of the caregivers stated that they didn't believe their child/children met these guidelines during the colder months of the year.

Six participant caregivers said that they do use AT to get around, though one only does so during the summer months. All participant children seem to engage in some level of AT. Six of these children walk and/or bike to school. One only does this when the weather is favourable. The remaining three children only engage in AT to get to friend's houses, parks, other close community recreation spots, or simply walk/bike as a leisure activity in itself. All AT engagement was described either as walking or biking.

4.2 Overview of Themes

Three themes were developed using the framework method outlined in section 3.9.2 (Collaço et al., 2021; Gale et al., 2013; Ritchie et al., 2013). These themes represent the major findings that came out of the 18 interviews looking at the AT of racialized children from their perspectives, and the perspectives of their caregiver. Themes have been organized to represent a narrative of the perspectives of these racialized children and their caregivers. Theme one explores fears and anxieties that racialized people may have that impacted their AT engagement. Theme two looks at the neglect of racialized communities and peoples regarding physical, social, and personal resources that support AT engagement. Finally, theme three looks at the enabling factor of community to racialized children's AT engagement, and how a real sense of a collective community helped reduce fears associated with AT.

In conducting this analysis, I worked to develop a deeper understanding of the unsaid meaning or essence behind the stories and experiences of these racialized children and their caregivers. This level of analysis was supported by the reflexive journal kept throughout the research process, and by participant quotes that illustrate my interpretations of the lived experiences of these children and their caregivers.

4.3 Theme 1: Walking in Fear

When discussing perceived barriers to AT engagement, both racialized children and their caregivers cited fear or reduced feelings of safety that impacted their travel around their community. Participants discussed fears associated with their children being too young to safely travel through their community, fears connected to racial profiling and misidentification, and increased danger for women and girls.

4.3.1 Too Young to Safely Use Active Transportation

Participant children and caregivers both mentioned general fears associated with AT engagement that weren't influenced by one's racial identity. Fears cited by children were more broadly connected to a belief that their community, or the larger community outside of their neighbourhood wasn't safe for young children to commute around by themselves. *"If maybe the community was more safe. You know, because it really isn't safe for children but well, my age maybe. Well, for younger, it's not safe for them to be out and about"* (Youth 2, age 15). These fears were connected to crime rates within the HRM and high volumes of vehicle traffic. Younger children were seen as unable to make safe and informed decision making that would enable them to participate in AT on their own. Fears relayed by caregivers also touched on this lack of confidence in their child's ability to safely cross the street or navigate around their community when they were on their own.

"I remember last year in the summer; my kid was asking me to go to the library on his bike. But I asked him not to do that, because to reach to the library, they need to cross the main road and I wasn't sure about his capabilities of doing that on a bike" (Caregiver 8).

This lack of confidence in young children being able to travel safely on their own was held by caregivers and children who saw themselves as older and more capable. As this youth goes on to describe how they use AT “*So I get to school by sometimes walking or taking the bus. I normally run errands by grocery shopping for my mother*” (Youth 2, age 15). This youth was comfortable with engaging in AT independently, and even supported their mother with household responsibilities by running errands through AT. The act of the mother having the child run errands showed that she also has confidence in her daughter’s ability to do these tasks safely. This child’s self-confidence could also be bolstered by this parental confidence in their ability. Other children who had similar confidence in their AT abilities all identified as teenagers or as an older sibling.

4.3.2 Being Profiled as a Criminal

Identifying as African Nova Scotian or Black led to increased fear due to societal perceptions and racial profiling. These fears centered on the potential of being perceived or misidentified as a criminal or delinquent. Children who identified as African Nova Scotian or Black and their caregivers both mentioned that these fears impacted their AT participation. One child said this “*what if I get stopped on the way to school because they think I'm doing something bad*” (Youth 4.1) in relation to why they didn’t use AT to commute to and from school. This fear was associated with police or other community members assuming that the child was going to do something against the law. This child’s caregiver had similar thoughts, but only in relation to AT done after the sun had set.

“SB: And what sorts of things might make you feel unsafe at night?”

C4: Oh, it's just because it's darker outside. You don't know who's coming. You don't know what's going on and also being a Black person, I don't want to be yeah, misidentified. I would rather just stay home” (Caregiver 4).

This caregiver speaks to their own lack of feeling safe after dark, though they did indicate that they felt comfortable with using AT in the daytime. This difference in responses by both caregiver and child could be due to negative societal perceptions mainly centering on racialized children, rather than racialized adults. It could also be connected to the fact that an adult walking on their own during the day is largely seen as normal within society, though a child walking on their own is more of a rare occurrence, which could lead to others within the community assuming that the child is doing something wrong. This next caregiver further explained these incorrect stereotypes and misidentification of racialized children.

“I've noticed that just people generally when they see Brown people, they just generally get like they're scared . . . So, like a little group of Brown children on their bikes, oh my God, the gang. It's like no, those are just some children enjoying their childhood. And us, I guess things like that, you know, being profiled and made to think that they were being demonic in some way when if they weren't the colour brown, you would just be smiling at them doing what they're doing” (Caregiver 5).

This widely held belief that Black and Brown children are involved with gangs and criminal activity is a major barrier for racialized youth to engage in AT. This is due to caregiver’s concerns of their children being racially profiled, and the beliefs of society being so prevalent that racialized youth have begun to associate their own image as one

of a criminal. This quote from Caregiver 5 adds that these instances of racial profiling and misidentification lead to Brown and Black children feeling as if they are doing something bad, when they are simply walking or biking around their community. This negative reinforcement could also be a factor causing racialized children to not use AT.

Other experiences of racism compound these feelings of fear and unease with travelling around one's community. One child shared such an experience:

“We were all walking and there is this like drunk dude, right. He was just like, just being normal, normal drunk. . . And we were like, walking in [to a store] when he moved out of the way and he was looking right at me, like directly at me and pointing at my other [friend] that's also fully black, because we were like the darkest one's there and he said, you f-ing then the N word, with the hard -er”

(Youth 5.1).

Encounters such as this can be frightening and traumatizing for racialized children, leading them to feel like an outsider or like they don't belong within their own neighbourhood. It can also impact other children who may have witnessed the racist abuse but weren't targeted. In the incident described above, there were other children present. During their interview, Youth 5.1 went on to mention how they couldn't talk about the incident with their white friends, and how awkward situations got when it was brought up. This discomfort and unwillingness to talk about this racist experience further isolates racialized youth and could lead them to believe that their peers share these racist and discriminatory beliefs. Though not all the racialized children who were interviewed relayed personal experiences of racism, the fear that such an encounter could occur, as

well as racialized children hearing accounts of racism experienced by their peers was described to have a negative impact on AT engagement.

When asked about how we can reduce racism in the community, one child said that *“we could stop judging them [racialized children] when they're coming into, walking into stores. Not think that they're being bad. . . By first starting to see what they see from their eyes”* (Youth 4.1). This child explains how if people could put aside their racist beliefs and the stereotypes they hold of racialized youth, these youth would be more inclined to participate in AT. In sharing the experiences and voices of these racialized youth, perhaps the impact of racist beliefs and actions can be realized, and people can reflect and change their behaviours so that racialized children feel safe and comfortable with travelling around their community.

4.3.3 Free Range Children = Negligent Caregivers

Caregivers presented concerns of being perceived as negligent or abusive to one's children and losing them to social services was also an apprehension shared by caregivers. One caregiver explains how this fear was a barrier for their children's AT.

“Not a lot because in the city brings on other issues and one of the things is, and I remember this from growing up, as my parents didn't let me do that [AT engagement], I wasn't allowed to do that. It was seen as you know, it's not safe, they would look like parents who were neglecting us. And I know that that's something that a lot of parents, especially myself, would consider. . . I don't know what the term that I think a friend of mine said, that she had free range children. But I remember hearing this nonsense about free range children. Like what? Is that right? I let my child loose then I look like a negligent parent to be reported.

No. So I think that I have to balance active transportation with those things in mind and with those social things that come along with it. If I was to allow my child to go down the street alone, you know that's just not safe. Even if I wasn't in a city, there are laws, right? And I think that might be some of the reason why I wouldn't do that in the city” (Caregiver 1).

This caregiver explained how this fear of being labeled as negligent overpowers the benefits that AT participation would provide to their children. That this concept of ‘free range children’, which is a white middle-class movement, can’t be applied to a racialized context where more negative assumptions are made of caregivers.

This fear has spanned generations, as this caregiver’s parents were also worried about being perceived as negligent. Though caregiver 1’s fear could be explained as a result of generational trauma, this next quote shows that it is still a very valid concern to have in today’s day and age.

“And it's specifically having to do with children's aid, and I've spoken to social worker about this topic. . . It's that you can't just let your kids do whatever they want. That's because there is a system that sets out to find negligent people and put a light on them, whereas other people who are not racialized will not have the same sort of pressures because that same light is on. And that's not just the profession, it's actually real. It's real, when you speak to social workers”

(Caregiver 1).

This belief that AT engagement could result in the loss of one’s child is a significant and real concern, highlighting that racism is prevalent within the very system that is charged with the safety of those most vulnerable members of our society, whereby racialized

people must prioritize and consider whether the benefits of AT engagement outweigh the risk of being charged with negligence. Though this fear is presented as a hypothetical situation, it does bring to light the idea that racialized people are worried about how they present to their community and needing to put their best foot forward. This could be connected to this idea presented in the previous section, that racialized people are “*made to think that they were being demonic in some way when if they weren't the colour brown, you would just be smiling at them doing what they're doing*” (Caregiver 5). In villainizing racialized people and jumping to conclusions, there is a sense of *othering* and isolation as racialized people learn that they must be careful and thoughtful of how they act when they are out in their community, or beyond, as these actions could be misinterpreted by society.

4.3.4 Increased Danger for Women and Girls

The intersectionality of identifying as a racialized female had added complexity regarding safety when engaging in AT. These additional factors were only presented by participant caregivers who identified as women.

“Oh god yeah, after I got raped twice down here. People are disgusting, yeah, that's why we teach our girls, you know you got to kick their ass, it doesn't matter, you destroy them . . . Also, because they're girls? Umm, so you know there is always that yeah, that benefit of being kidnapped and victimized” (Caregiver 5).

This caregiver spoke about how her own experiences of violence have shaped how she has parented her own children. She explained her efforts to prevent her children from having similar traumatic experiences, by openly discussing what she went through and what she would have done differently. In having this dialogue with her children, she has

also provided them with guidance and knowledge about what they should do if they were to find themselves in a similar situation. In the case of this family, the caregiver's past experiences of violence haven't led to a reduction in her children's AT engagement, as she was able to provide them with advice that would increase their ability to defend themselves. Many other girls have a very different experience though.

For many, they are sheltered by their caregivers and prevented from traveling on their own, "*they knew, like me, walking to different places, they tried to drive me everywhere because girls shouldn't be seen outside walking around like that*" (Caregiver 1). Violent encounters, the threat of rape, or of being kidnapped are real fears that young women and girls face as they navigate the world. These continued violent encounters have led to girls continuing to be sheltered. In being sheltered and kept away from the world, the families of these girls seem to be allowing the actions of others to determine how their child engages with the world. This is in direct contrast to the family described above. Though it is the actions of others causing the harm, it is the child who is impacted by not being able to engage in AT.

4.3.5 Summary

Within this theme of *Walking in Fear*, participants relayed fears connected to parental concern of their child's ability to use AT independently, being racially profiled as a criminal or delinquent, caregiver's being charged with negligence, as well as the increased danger that comes with identifying as female. The fears stemming from caregiver concern over their child's safety don't connect as directly to one's racial identity, though fears related to being profiled certainly do. These negative stereotypes and societal perceptions create many barriers for racialized youth's AT engagement as

they are forced to consider how they are being viewed by others in their community. The impact of this racial profiling goes beyond personal interactions, as racialized people and communities have received reduced resources and supports that would enable them to engage with AT.

4.4 Theme 2: Neglected or Forgotten Racialized People

The experiences of racialized children and their caregivers displayed the obstacles that racialized people face, impacting their ability to engage with health promoting activities like AT.

4.4.1 Financial Barriers to Being Active

Cost was a barrier brought up by caregivers. In relation to community wide financial resources, one caregiver discussed the inability to maintain an informal walking group.

“It's hard to keep those kinds of things [informal walking group] up because, well, maybe it doesn't take much financial resources, but sometimes it does. Because if you're taking time away from your work, time is money, as they say and we can't financially afford that. And then of course, we tried to have like water and like fruit available as something afterwards. Well, that's money, you know. So, there are those things. And then it just, we went for a little while, but then it scaled off and right now most of those people are not as active any longer. And that's a shame” (Caregiver 3).

Though the walking group in question was for adults, the potential for a similar group focused on engaging families was discussed. Such a group would encounter the same financial barrier, as fruit and water would ideally be provided to all participants. It was

also discussed that prizes or rewards for participating in a walking group could lead to increased motivation to participate.

As stated in the previous quote, time is money. Caregivers described the high costs associated with PA programming. *“But it's also crazy expensive, like these camps. I work extra so that we can cover these camps because they're not affordable. They're not affordable. They're not accessible and that's all there is to it”* (Caregiver 1). As well, due to the high cost of living, caregivers of racialized children are working more and have little time to spend with their children. Which impacts AT access as caregivers don't have the time to engage in AT with their children due to the high cost of living.

“I don't know how people can police what they do for themselves as well as their children. It's hard. So, oftentimes we rely on the school systems to be able to provide adequate time to play and engage, because that's where they are for most of the day. I just don't know how much more time I have in the day to donate to that [regarding supporting AT engagement], right” (Caregiver 1).

This inability of caregivers to support their children with engaging in AT or other forms of PA result in the need for the school system or out of school programming to fill this gap. The school system can't supplement PA engagement to the needed level, as participant children noted that their classes were often split into two semesters. This would lead to them only having gym or PA focused classes for half of the year. This leads to out of school programming being the next answer to increase children's PA.

4.4.2 Lack of Community

Caregivers of racialized children listed several barriers that impacted their and their child's AT engagement. These barriers span from community wide to individual.

Being within the racial minority and having few if any friends or peers who looked like them was discussed by many of the caregivers. *“When I don't think that they have a lot of friends that they can identify with, right, like they don't have a lot of black friends in the neighborhood and also the culture is different here”* (Caregiver 4). Not having peers who they could identify with and feel safe with was discussed as a factor that impacts a caregiver's sense of comfort with their child engaging in AT. This was due to caregivers thinking that their child wouldn't be able to find a sense of connection or community with children who are of different races. This would limit their ability to use AT with others as they could have fewer friends that they could travel with.

Throughout the interviews, this desire to find an accepting community with shared values and beliefs was a recurring statement. Some of the caregivers who identified as immigrants, they had to go a long way to find this sense of shared identity for their children. *“And with my kids, they take the bus every day for the school, because our school is not in the community”* (Caregiver 2). This caregiver chose to enroll their children in a school that specifically catered to racialized children. While their children would be able to create a social network with these other racialized youth, they weren't able to engage in AT due to the distance of the school from their home.

4.4.3 Inconducive Built Environment

Features of the built environment are included within these obstacles, though not exclusive to racialized children, these obstacles were presented in communities where racialized people live. Within the HRM, racialized children stated challenges related to safe areas to walk or bike within their community.

“SB: Are there not enough sidewalks in your community?”

Y4.2: There are here, but like for next year, if I want to bike like to my school or something, there's areas that don't have the sidewalk and just the road, so I wouldn't be able to go there with my bike” (Youth 4.2).

Though this child is describing an urban area, this lack of uniformity in the presence of sidewalks impacts the child’s ability to safely participate in AT as they may not feel comfortable with biking on the road. Another child cited pedestrians and vehicles as hazards impacting their ability to safely engage in AT. Within the urban areas of the HRM, large volumes of vehicle traffic were presented as a large hazard.

“Y8: Like if I'm walking or riding my bike and I'm doing it on the sidewalk and there's like a person like walking on the sidewalk when I'm biking, then I would have to go on the road and I might, have to like, brake really fast if there's like a car on the road that time. So, like that could be like a problem.

SB: Are there no like bike lanes and stuff?

Y8: Yeah” (Youth 8).

This child has also discussed a lack of comfort with biking on the road due to fears related to having to travel with unpredictable vehicle traffic. The lack of bike lanes within these communities presents a barrier for children as they aren’t able to safely bike on the road as a result.

4.4.4 Systemic Racism Towards African Nova Scotian Communities

As previously mentioned, a few of the dyads who participated in this study identified as African Nova Scotian and lived in historic African Nova Scotian communities. Caregivers from these dyads touched upon the unjust settlement of these

communities and the lack of governmental support that they face, simply due to them being racialized.

“I think it really comes down to the fact that we are a racialized community. So, our needs are not seen as needs. They're seen as wants. And so therefore, a lot of weight isn't given to them. Excuses are being given as to why we shouldn't or can't have what we're advocating for in the way of change, and I think those things again happen because we are positioned where we are, which is where many, many years ago we were placed. And that was strategically” (Caregiver 3).

Examples of these needs include significant improvements to the built environment within the communities.

“So, for instance, the walking piece, you know our community is a community that we could very easily walk to the hubs or each other's homes to visit. It's a walkable distance, but because of the landscape and the shoulders of the roads they're uneven, not very wide and there's no true safe walking designated space” (Caregiver 3).

The community being discussed by caregiver 3 is a rural African Nova Scotian community located on the outskirts of the HRM. All the roads within the community have high speeds, with many of the roads having speed limits of 60 km/hr. There aren't any school zones or reduced speed areas within the community that could increase children's safety when traveling to school. There are also a lack of bike lanes and crosswalks throughout the community. In addition to these built environment challenges, it was also discussed that there was a lack of an exit ramp to enter and leave the community from, leading to there being no designated area to reduce speed before

entering the community off the highway. Caregiver 3 mentioned how this was the only exit that didn't have proper infrastructure within the area. All these factors impacted the accessibility of AT for youth within the community.

“He [child] may say that he wants to be more active. I know in the past he's expressed it with us, but my husband especially almost refuses to allow him. He's got a friend he could easily walk to, or bike to school, and he's often told no because we're not, we don't feel safe in it now. And my husband, just for context, he's grown in this community, so he's seen some of the tragedies that have come of just children out, walking to their friend's house or whatever” (Caregiver 3).

This lack of infrastructure has had wider impacts than just preventing safe travel around the community. When children and youth have tried to participate in AT, they have been in traffic accidents due to the high speeds and lack of designated walking areas. And in the case of Caregiver 3's child, it has resulted in a limited ability to be independent, as this child is reliant on others to be able to connect with others within the community and express themselves:

“And then I think that directly ties to the racialized piece. As a young person, it's hard for them to go outside the community and participate in other activities, other social events, meet other people because they're almost stuck here because they're so reliant on community and family to take them places. And, well, we work and have our own things that we're obligated to do. And yeah, people do it. Don't get me wrong. Like you know, we're running, running, running, running and while some of those pieces might not be unlike other parents and people who live outside of urban areas or outside racialized communities. Umm, there's an

add-on because we are already at a deficit of our income levels where again the things that we aren't able to readily access that others can access, just reach out your hand and you have access to it, and we don't. Again, a lot of it is that positioning of where we are as a community figuratively and physically”
(Caregiver 3).

The experiences that this caregiver shares presents an idea of how limiting these communities can be for racialized youth due to a lack of government concern and funding to make needed changes.

4.4.5 Summary

This theme, *Neglected or Forgotten Racialized People*, highlights the impacts of systemic and historic racism. Though most clearly seen within the last sub-theme, the participant narratives paint a picture that racialized people experience inequities in health promoting resources. As racialized families often have reduced financial resources, they have limited opportunities to choose where they live within NS. Throughout these communities, there was a lack of improvements made to the infrastructure that would encourage youth AT engagement. There was also an inability to maintain AT programming due to reduced community financial resources. In addition to physical resources, access to social resources was also identified as important.

Not having community connections or individuals that racialized children could identify with was seen as a barrier to AT as these children were described to have a reduced sense of acceptance and comfort within their community. The desire to achieve this sense of community was so great that some children would travel long distances to attend schools or be in environments where they could connect with other racialized

children. Though in the case of children who lived in racially segregated communities, while they were able to make connections with other racialized children, the built environment within these more rural communities was so inadequate that these children weren't able to safely participate in AT.

4.5 Theme 3: Community is More than Physical Environment

Community was by far the most recurring theme discussed by both racialized children and their caregivers. The type of community referenced was one where there is a sense of shared identity and connection with one's neighbours. Such an environment was described by one caregiver,

“Yeah, also because it's a family kind of community like [community name] was only built because they killed Africville and so mostly like my black family members was growing up there. So, it's like, everybody's family, then the newcomers, they're [South Asian], they're Muslim, and they know I'm Muslim. My oldest daughter, she's [South Asian] and black. So, like we all like, get along, we're protective of our children, like the new Africans and other new people from different areas like the white families. Like we just all are like, so these are our babies and we wanted to keep them protected. So, everyone has got an eye out. Yeah, it's very safe” (Caregiver 5).

The interconnected community described by this caregiver has shared values, as can be seen from the collective effort to keep the community children safe. Even though they don't share the same racial identity or background, they were able to bond and come together. These factors all support racialized children to participate in AT and to feel safe while doing so. Connected communities are facilitators of PA and AT for multiple

reasons, one being that the community has a safe environment in which can engage with AT, and another being that they can participate in this movement together. When children in the community become friendly with one another there could be increased motivation to engage with AT as they are able to participate together and encourage each other to continue engaging with AT.

Proper communication with your neighbours was one of the main pieces that participants identified was needed to develop a safe and engaging community. One caregiver described how living within a community that has large numbers of people with shared traits and values enabled their family to build connections and communicate with others, despite not knowing how to speak English. Though this caregiver isn't discussing AT engagement, they are still presenting group engagement in outdoor movement which could be transitioned into AT engagement.

"We see lot of [South Asian] communities here. So even my partner she is, you know, she can at least communicate. And you know, there are a lot of [South Asian] people here. So that she can manage, and she can go alone as well. And she does as of now. And for [child] as well, as I said, like, you know, at least 12 kids we have in our community itself. So, they are engaging, and they are actively playing outside so there are no language barriers now" (Caregiver 6).

A language barrier is a significant concern for immigrants as they may not be able to connect with their community, which could reduce their AT engagement. In turn, living in a community like the one described above, where there is a shared language throughout the community is an enabler for AT engagement.

4.5.1 Knowledge Gaps on PA Guidelines and the Benefits of AT

As perceived lack of safety in one's community was discussed as a major barrier, efforts need to be made to increase community wide safety. In addition to this, educating racialized families about the benefits of AT participation and the PA guidelines could increase engagement and empower community members and/or the government to work on some of the safety issues identified in section 4.4. As only one child knew what the PA guideline was for their age group, educating communities and families about the guidelines could increase movement. *"Knowledge. I mean, if they have enough knowledge of something, teach them this thing, maybe they will engage more"* (Caregiver 2). Education on the benefits of AT also has the potential to shift generational behaviours and influence families to include more health promotional activities into their lives:

"I think education is always really important because I know that there are some families who miss the way it was for me when I was younger. Like I'm second generation like my parents immigrated from South America, from [country]. He [CI's husband] is part of the African diaspora and I grew up, I was born in [Canadian city outside of NS]. They knew, like me, walking to different places, they tried to drive me everywhere because girls shouldn't be seen outside walking around like that. That's not a problem for my children. It's not something that I do with them. But I think that if maybe promoting like you are doing about the different ways and benefits of it and why it's good, I think that's always a great way" (Caregiver 1).

4.5.2 Role Modelling Active Transportation

In addition to educating families, having caregivers role model health promotional behaviours can have a positive influence on the entire family.

“I mean, we need to teach and encourage to walk to school or walk to a shop. . . I mean, it's more of the parents engaged with the kids, so that will help the kids to be more actively involved in these activities” (Caregiver 7).

By engaging in AT with their children, the caregiver described moving beyond simply preaching about the benefits of movement. In engaging with AT themselves, they were showing their child that even they needed the health benefits that AT can provides. When elements of fun or competition were added to this experience, the child developed extrinsic motivation to keep them engaged with AT. *“My mom has this little thing on her phone, it's an exercise app to see how much she walks today and tomorrow and all that and I do it with her”* (Youth 5.2). In using the caregiver’s fitness tracker, the child was motivated to *close the rings* everyday by walking with her mom.

Beyond just the role modelling of positive behaviours, participants identified how walking or biking with one’s child enables further social time within the family. One caregiver discussed how this AT time resulted in a stronger bond between caregiver and child:

“Of course, you know not only on the physical terms, but we chat when we are walking together and we, you know, exchange the information that will improve our bonding as well, right. So, if we are walking together, it's not like just like we are walking, you know we do discuss other stuff and whatever the challenges we

are facing and how was the schooling, just a small chat that improves our communications as well and it is improving the bonding as well” (Caregiver 6).

4.5.3 Need for Community-Wide Engagement Opportunities

Having larger scale events and programming within the community was also suggested as a potential strategy for increasing AT. The element of fun described above can be expanded out to include the entire community, as this caregiver suggested:

“Maybe we could plan like a bike race or something for them so that they are encouraged to, you know, practice every day. And then yeah, they can have fun during that race time”

(Caregiver 8). Other suggestions of events included “play time at the park and more activities in the community. Like sometimes I wish we had a rec center in my community”

(Caregiver 4). These caregivers both discussed general strategies to get people moving more, which could be to host larger, community-wide events. As seen in the previous section on role modelling, people are more likely to engage in AT if others are also role modelling this health promotional behaviour. In creating connections among community members, there is the opportunity for similar positive relationships to form.

This desire to get the whole community involved could be related to feelings of being disconnected from their communities. Both communities discussed in the quotes above are located within urban environments that are racially diverse. So, these individuals could be looking to find others who share the same values and ideals to connect with. As many racialized people identify as collectivistic, this could connect to that desire to build a collective community from which AT strategies can be implemented on a community-wide level.

4.5.4 Empowering Youth to Engage in AT

Though an earlier theme identified safety concerns with children engaging in AT on their own, factors such as educating children on how to safely walk or bike around their community and having children travel in groups were discussed. *“Knowledge, just teaching the young ones about safety so they avoid certain problems, like not to engage with people you do not know”* (Youth 2). In teaching children how to engage with AT safely, there is a potential for both their self-confidence, and for caregiver confidence in their ability to travel around their community to increase.

Both caregivers and children mentioned that participating in AT with other children would increase feelings of safety and motivate them to engage in more AT.

“SB: What would make you participate in more active transportation?”

Y7: I mean, like I said, if there is some like groups, maybe like with my friends in there or if there's some kids in their group, I would definitely go join them”

(Youth 7).

Though safety in numbers is a factor, this youth could be motivated to participate in AT simply because their friends already were. School formed walking groups were also discussed. Such groups could enable children to make other connections and friendships within their community by engaging in AT together.

4.5.5 Summary

Within this theme, an increased community capacity was identified as an enabler for AT engagement. In connecting over shared traits and values, communities can become spaces where everyone looks out for each other. Within this environment, there were reduced caregiver and child fears connected to AT engagement. Needs were

identified around increasing family and community knowledge, role modelling health promoting behaviours, creating community-wide opportunities to engage, and empowering youth through education and increased caregiver confidence. Meeting these needs on a community-wide level would lead to more widespread positive health outcomes along with increasing community capacity.

4.6 Summary of Themes

In exploring the lived experiences and perspectives of racialized youth and their caregivers on AT engagement, three themes were identified. Fears related to negative external perceptions and racism were identified to be a major barrier that prevented these racialized youth from engaging in AT. Dyads discussed how they had to balance AT engagement against the potential of physical/mental harm or criminal allegations. Neglect of racialized people and communities in terms of financial support, built environment needs, programming meant for this demographic, and sense of community was also defined as a theme. This neglect can be seen to be connected to systemic racism and racial segregation caused by the government. This racism can be connected back to the previous theme as systemic and historical racism have led to the creation of negative stereotypes and racial profiling. The enabling factor of building community capacity through addressing needs on a community-wide basis was also identified as an enabler for AT.

4.7 Meta-Stories

The following narratives represent three example dyad categories that were identified in this analysis. These meta-stories present characteristics of these dyad categories and how they are impacted by the barriers and enablers identified above,

adding further context to the three themes. The meta-stories are differentiated by how each example family engages with AT.

4.7.1 The Family that Can't Safely Use AT Due to Governmental Neglect

Within this first dyad type, both the racialized child and their caregiver didn't participate in AT, though the sole reasoning behind this lack of participation was connected to safety concerns related to the built environment. Only one participant dyad fit within this meta-story type. This family lived in a rural African Nova Scotian community and identified that both caregiver and child would participate in AT if the built environment would allow for safe travel. This rural community lacks sidewalks, crosswalks, bike lanes, and no reduced speed areas, which all add to the inaccessibility of safe AT in the community. The only area that can be used to engage with AT is the shoulder of the road, which is hazardous due to the high vehicle speeds as people are traveling through the community.

This caregiver, who didn't always live within this community used to participate in AT in the past, but having moved to this African Nova Scotian community they had since been unable to participate.

“SB: So, do you currently engage in active transportation?”

C3: I just don't, I'm not afforded the weight of participating the way I feel safe in participating” (Caregiver 3).

Though the child in this dyad hadn't ever engaged in AT, they had expressed that they would like to be more active, and that AT would be a good source for this PA, though they weren't permitted to walk or bike around their community:

“SB: Oh, and what are some things that might get in the way of you walking from place to place?”

Y3: Oh, the speeding.

SB: What about the speeding gets in the way?

Y3: If someone’s going too fast and they swerve off the road.

SB: And are you worried that they would hit you?

Y3: No.

SB: Is it more that your family's a little bit worried about that?

Y3: Yeah” (Youth 3).

Though the caregivers are concerned about the challenges with the built environment and the resulting lack of safety, the child would still like to participate in AT despite this. This could be due to the child not recognizing the impact of the safety concerns, in addition to the caregiver not having confidence in even their own ability to safely use AT throughout their community. Health promotional strategies for this family need to address the community’s-built environment issues and develop infrastructure that would facilitate safe AT use. Such infrastructure changes could include the addition of separated sidewalks, crosswalks, bike lanes, school zones, etc.

4.7.2 The Next Generation Using AT Despite Safety Concerns

The next category of dyad found was when the child engaged with AT, but the caregiver did not. There were two different scenarios that fit within this meta-story. The first scenario was where the child had a desire to engage with more independent AT, but their caregiver wouldn’t allow them to participate beyond their small neighbourhood. The

caregiver in this dyad didn't engage with AT themselves due to work and the added time commitment of other childcare/household responsibilities.

“SB: Do you think if you were allowed to maybe walk a little bit more out and about that you would be able to go and do some of the things you would like?

Y8: Yeah” (Youth 8).

Within this case, the main barrier impacting the child's AT was the lack of caregiver confidence in the child's ability to safely cross the street and engage with AT in the larger community. This meta-story aligns with the theme of *Walking in Fear* as it was the caregiver's fear which appeared to be related to their child's AT abilities that had the main impact on their AT engagement. This fear was related to them not trusting their child to make informed and safe decisions when engaging in AT, such as not talking with strangers, and crossing the street correctly.

As the built environment wasn't seen to be causing obstacles for AT engagement, health promotional strategies that could support this family include those that would increase the caregiver's sense of confidence in their child's ability to engage in AT safely. Specific strategies that could increase caregiver confidence would be to offer an educational program that teaches families how to engage in safe AT together. Such a program could increase children's abilities and self-confidence, as well as increase caregiver's confidence in their children's ability to transport themselves safely.

The second scenario is very similar to that of the first meta-story as this family also lived within a rural African Nova Scotian community that didn't have the infrastructure needed to safely engage in AT. This specific family was able to walk and bike on their own property due to the large size, though it was indicated that not all the

families living within this community had the same luxury. The caregiver described how they would use other strategies to increase their movement, though they would prefer to have the ability to participate in AT:

“Choosing to park further away and relying on micro-strategies like that, there are no buses out where we live, so there's no reason to walk to a bus. It's dangerous to jump on any kind of bicycle or there are no parks nearby to do that”
(Caregiver 1).

This caregiver was someone who really values PA and movement and has made accommodations to their own lifestyle to increase movement, though they still weren't able to engage in AT safely. They went on to explain some of the factors that prevent safe AT engagement in their community:

“It's rural, so the road that we live on is chip sealed. It's dangerous and you can fall and hurt yourself pretty bad. A lot of the trails can be muddy and dangerous with the animals, so my children aren't allowed to go there by themselves”
(Caregiver 1).

Despite the challenges with the built environment, this child still participated in occasional AT, describing how: *“I walk sometimes, but not too much. I sometimes walk to this like I don't know what you would call it. It's called the [store name] . . . It's about a 45-minute walk, maybe”* (Youth 1). This youth explained that this participation was motivated by the desire to go to this store, and by not being old enough to have a driver's licence, so AT was seen as the only way to fulfill this desire. For this child, the independence that they could gain through engaging in AT on their own outweighed the safety concerns that would otherwise impact their AT engagement.

It can be seen clearly here how infrastructure needs to be improved so that children who are engaging in AT can be safe, and to provide caregivers with the confidence that their child is safe when independently traveling around their community. Health promotional strategies for this family need to be similar to those used within meta-story 1 and need to focus on addressing the problems with the built environment. As this child was actively engaging in AT despite the safety concerns, there is a need to tackle these built environment challenges sooner rather than later to prevent tragedies from occurring within this community.

4.7.3 The Family that Walks and Bikes Together

The final case found within this thesis occurred when both racialized child and their caregiver described taking part in AT. There were also two scenarios that fit within this last meta-story, the first being one of necessity. This first family unit, of which there were two within this sample, had to rely on AT to get around their community as it was the only method through which they could travel.

“I can't drive, so I go [by walking] for shopping because I am, you know, near to my place. I'm lucky I'm near all the stores. All kind of stores like Walmart, Superstore, the mall any need like we need to get a prescription. I go by walking to the pharmacy, for work, I go by walking back and forth, dropping my kids to the school, back and forth every day” (Caregiver 2).

Due to not being able to drive, this family, had to rely on AT to go everywhere. As this family lived within an urban environment, they had the ability to travel safely to meet all their needs. This family on occasion also used public transit or taxi to travel to any location that would be too far to comfortably walk to. *“So, I get to school by sometimes*

walking or taking the bus. I normally run errands by grocery shopping for my mother, so that is what I do.” (Youth 2). Though this could be seen as an ideal situation, as all members of the family were engaging in AT, the reason that this family was unable to use other forms of transportation was due to a low SES and not being able to afford a vehicle. This AT engagement was therefore more likely due to necessity rather than choice, as these families also stated that public transit was only so useful due to the bus often not stopping for racialized families, and that taxis are too expensive to use except at a last resort.

As this family wasn’t experiencing any obstacles that were impacting their AT engagement, there isn’t a need to present health promotional strategies that would increase AT. Better financial supports for newcomers to Canada and African Nova Scotian people could support in improving the wellbeing of this family though, as both caregiver and child discussed how having a bicycle would support in reducing the need to rely on public transit to travel as they would be able to get to their destination faster than if they were just walking.

In this second scenario, AT engagement was motivated by a desire to engage in more movement to improve or maintain health. This caregiver explains how rising numbers of cardiometabolic conditions has worried them, and that AT engagement reduces that worry. “*So much high blood pressure and diabetes and just all those evil concerns there, number one to me that's like my biggest concern*” (Caregiver 5). They explained how they had seen the impacts of these conditions within their community and engaged in AT as they were concerned for their families developing such conditions as a result of physical inactivity.

“Yeah, [my mother] walks. She likes walking everywhere, but it's good. She like, never wants to drive now. She, can drive, but she doesn't want to. And if it's like raining or we're just all too tired to walk back, we take the bus. But mainly, yeah, we walk. . . you can lose weight from it and get healthier.” (Youth 5.1).

This youth quote shows that this desire to improve one’s health due to AT engagement is a belief that all members of this family share, showing the health promotional ability of role modelling to increase lifelong AT engagement among different generations.

Due to the cardiometabolic impacts on these communities, there is a great need to work with these communities to increase AT and movement. Health promotional strategies that could support racialized communities in engaging with greater AT could be a larger scale of role modeling, where instead of just caregivers and children influencing each other, families are partnered together. A family like dyad 5 could be partnered with another less active family, with the goals of participating in AT together and developing community-wide positive habits around movement.

These families also had an increased level of safety within their community due to having a shared sense of community and values with those in their neighbourhood.

“So, like we all, get along, we're protective of our children, like the new Africans and other new people from different areas like the white families. We just all are like, so these are our babies, and we want to keep them protected. So, everyone has got an eye out. Yeah, it's very safe” (Caregiver 5).

This sense of community was another enabler that supported this family in participating in AT, as they had increased feelings of safety when moving around their community. Strategies to increase AT could also work at increasing community capacity and

community connection with the intention of improving feelings of safety within racialized communities.

For these three families, who are all engaging in AT, this engagement wasn't too much of a challenge as they also all lived within urban areas of the HRM. The only real challenge cited by these families was related to weather, though one family mentioned how they participated in AT all year long, regardless of the weather.

“Yeah, I mean, we used to do it, when I mean in the summer times we used to walk to my daughter's school. But we drop her in the winter, I usually drop her by car, but in the summertime I either take the bicycle or we just go by walk”

(Caregiver 7).

Those who cited weather to be a barrier all identified as new immigrants to Canada who were originally from countries that are much warmer than Canada. As this type of family only engaged in AT during the summer or warmer months, there is a need to identify strategies for engaging them in AT or other forms of movement during the colder winter months to make up for this lack of engagement during the winter.

4.8 Summary of Meta-Stories

The three meta-stories were developed in relation to different shared narratives on how AT is engaged with within the dyad and the different factors impacting this engagement. The first meta-story, *The Family that Can't Safely use AT Due to Governmental Neglect*, connects with the theme of *Neglected or Forgotten Racialized People* as it clearly depicts the inconducive built environment in African Nova Scotian communities, where both caregivers and children aren't able to engage with AT, though they would if these safety concerns were addressed. The second meta-story, *The Next*

Generation Using AT Despite Safety Concerns, presented families where the caregiver didn't participate in AT, but their child did despite the inconducive built environment, or caregiver concern over their safety. This narrative aligned with both *Walking in Fear* and *Neglected or Forgotten Racialized People*. As children's desire to engage in independent AT was stronger than the potential for harm or injury, there is a pressing need to address the problems with the built environment to reduce these risks. The last meta-story, *The Family that Walks and Bikes Together*, shared the narrative of a family where both the caregiver and the child engaged with AT. This was either due to necessity, with AT as the family's sole form of transportation, or due to a desire to improve familial health and wellbeing to reduce the risk of developing chronic health conditions. Links were found between this meta-story and *Community is More than Physical Environment* as a sense of connection and shared values and traits reduced the impact of the fears identified within *Walking in Fear*. The additional context provided by these meta-stories will be used to support interpretation within chapter 5 of this thesis.

Chapter 5: Discussion

The purpose of this thesis was to explore the lived experiences of racialized youth living in NS from both their perspective and the perspective of their caregiver in relation to AT engagement, and to discover what factors impact this engagement. The research questions sought to identify barriers and enablers that impact racialized youth engagement in AT and to identify potential strategies for increasing this engagement.

This analysis is situated within Critical Race Theory, which includes the understanding that our society is racially stratified, to better recognize how systemic and structural racism has impacted the experiences of racialized youth living within NS. The SEM provided a framework to understand how different determinants of health impacted racialized youth's engagement in AT by breaking down the thesis results into the five levels of the model. Three themes were found within this analysis: *walking in fear*, *neglected or forgotten racialized people*, and *community is more than physical environment*. This chapter will summarise these findings and discuss the themes as they relate to existing literature and policy. Implications of these findings will then be presented, followed by strengths and limitations, and closing with recommendations for the future.

5.1 Racialized People Aren't the Problem, Society is

In looking broadly at the themes and sub-themes that came out of the analysis of information shared by racialized children and their caregivers regarding barriers to AT engagement, there seems to be one overarching root, systemic racism. Using the SEM, I describe how there is a narrative of racial inequity that ties back to the concept of systemic racism. This narrative starts off with the policy level of the model, where this

systemic racism can be seen more clearly, and ending with the individual level where there were fewer clear connections that could be made. Banaji et al. (2021) use the analogy of a fish not understanding what water is, as they have never known a life without water, to describe this idea of systemic racism being so deeply ingrained in all aspects of society that it becomes difficult to recognize.

5.1.1 Policy

In reviewing the literature and reading all the policies and frameworks that discuss creating a NS where all people, regardless of identity, can move more and participate in AT, it's hard to believe that these statements will be put into action when presented with the lived experiences of these racialized individuals. As dyads living within rural communities described how they couldn't safely engage in AT and those living within urban environments felt that they engaged in AT at the risk of experiencing racism and violence, this thesis brings to light examples of the inbuilt systemic racism that prevents these individuals from receiving governmental support to reduce the barriers that limit their access to AT. The policies and approaches found within the literature do touch on the needs of racialized people, but don't really discuss how to support these individuals. The only document that presents a good job of working towards meeting the needs of racialized people within Canada is the Health Equity Framework which outlines shifts needed in ideology, systems, and actions (Engage for Health, 2024). It also presents a list of first actions that need to be taken to create a more inclusive Canada, though this document hasn't been implemented yet (Engage for Health, 2024). This thesis could be supportive in defining the shifts needed within the country so that it can become more inclusive.

As AT work becomes more widespread through the creation of policies and initiatives, there is a need to identify where racialized individuals and communities in NS fall within the literature. Over the years more work has been focused on reducing racial discrimination that is occurring within the recreation and leisure discipline (Recreation Nova Scotia, 2022). AT work within Canada is guided by the National Active Transportation Strategy, which does place some focus on needing to create inclusive AT infrastructure and programming (Infrastructure Canada, 2024). Plans and policies within NS don't highlight specific strategies for supporting the health of racialized individuals. Work such as Make Your Move (Healthy Tomorrow Foundation, 2023), which this thesis is connected to, are considering the needs of racialized people within NS, But there is a need for this work to go beyond understanding and exploration and move into actionable next steps that can support inclusive and accessible health promotional strategies.

Implementation of health promotion opportunities and development needs to move away from a utilitarian and capitalist approach that is focused on helping the majority groups and groups with wealth first, as this approach allows racialized people to fall through the gaps and be ignored (Aytur et al., 2008). Shifts need to occur within the planning and development sector of the government to ensure that low density and low SES communities like racialized communities receive built environment and infrastructure improvements needed for the community to be able to support themselves through increased community capacity (Gallant & Tirone, 2017).

5.1.2 Community

Acculturation can impact AT accessibility on community levels. On a personal level, a racialized youth may feel safety, comfort, and belonging while engaging in AT

around their community, if they have assimilated to the culture of their community, like those youth and caregivers in meta-story 3 (Rothe et al., 2010). These dyads feel a greater sense of connectedness and shared identity with their community leading them to engage in greater levels of AT. It should also be noted that these dyads lived in communities that had a moderate population of individuals from the same ethnic background. This validates what is found in the literature as feelings of belonging and connectedness increase one's confidence when engaging with and traveling around their community (Berry & Hou, 2016; Echeverría et al., 2015).

On the other side of the spectrum, if they hold themselves separate from the culture of their environment, identifying only by the culture of their racial identity, or by neither identity, which is marginalization, they may not feel as safe or welcome to travel around their community (Pottie et al., 2015). This can be connected back to the experiences of some of the dyads who identified as immigrants to Canada, or when those living in racially segregated communities venture outside of those communities. Individuals explained how various individual characteristics such as language barriers, and the like prevent them from building meaningful connections with others in their community. These characteristics that set racialized children apart from their peers and present them as outsiders (Pottie et al., 2015). On a larger scale, racist perceptions held by others also impacted one's willingness to engage in AT as they would have to balance the benefits of AT against the potential of a negative and/or violent encounter.

Other community level factors that impacted how racialized people engage with their surroundings were connected to experiences of racial profiling and prejudices held by other community members. Black and African Nova Scotian study participants

described how they faced racial profiling and misidentification and how these experiences have shaped how they now choose to present within and move around their community. The fears presented by these community members clearly connect to the over policing and systemic racism present within our judicial system, further cementing the idea that “Walking While Black” is not safe (Roberts et al., 2019). The intense fears described by participants in relation to misidentification and preconceived judgment of Black and Brown racialized youth display how this is a problem not of the past but is real barrier that these youth and caregivers have to face on a daily basis. Participants further described how media and news related to shootings and other types of violence have compounded this fear. Racism experienced by these black/brown youth, along with stories such as that of Trayvon Martin reinforce the negative stereotypes and racist views held by many individuals and institutions in North America (Calvert et al., 2020; Roberts et al., 2019)

Black and African Nova Scotian caregivers presented a distrust of Canadian policies and practices and discussed fears of protective measures being incorrectly used to describe these families, such as abuse, or neglect allegations. They described how they needed to be thoughtful of how their family is presented to their neighbors and community really display the sense of otherness, racial segregation, and lack of belonging that racialized people feel living with in NS (Quam et al., 2020; Wilson et al., 2023). This racial profiling and criminalization of Black/Brown families enhances the need for targeted and tailored programming to reduce the impacts of this systemic racism as well as create educational programming to reduce and rehabilitate racist ideology, thoughts,

and actions that run rampant within NS communities (Pottie et al., 2015; Roberts et al., 2019).

5.1.3 Organizational Level

The organizational level of the SEM relates to organizations and spaces that the youth engage with regularly (Kilanowski, 2017). Connections can be made to the knowledge gaps that were found on PA guidelines and the benefits of AT. Though education on these factors hasn't been identified as a need within the literature, it was presented as a challenge by many participants. They explained how they didn't have any prior knowledge about the PA guidelines, though most still thought that their children met the guidelines, as they cited movement engaged with during the school day. This showed their reliance on the school system to provide their children with at least 60 minutes of vigorous to intense PA each day (ParticipACTION, 2022). Through the interviews with children, it was found that the physical education (PE) class was often only available for half of the school year as many middle schools or high schools follow a semester-based class schedule. Youth who had this style of PE class would potentially not meet their PA guidelines during the semester that they didn't have the PE class. If caregivers were more informed about the PA guidelines, perhaps they would have put in more effort to give their children the chance to meet these guidelines. Additionally, if these families were aware of all the benefits to AT engagement, many mentioned how they would increase their engagement in AT. This is especially important given that lack of time was named as a barrier to increased PA engagement for one's children. The literature highlights how AT engagement is easy to include within people's regular routines (Prince et al., 2022), as they can just replace their vehicle-powered commute

with walking or biking. Using AT to commute to school would add to the children's PA engagement for at least five days of the week, having significant positive impacts on the children's health.

Financial barriers related to low SES were found to connect back to historical racism and segregation or to reduced employment opportunities for immigrant families. These challenges present barriers to AT as most caregivers are unable to take time away from work to support their children in participating in AT personally. As the caregivers cannot support their children, and caregivers don't feel comfortable in their children engaging in AT on their own, alternative strategies should be considered for how to increase access to AT engagement. One of the main ideas discussed during the interviews was the concept of developing or joining walking groups for children to walk to and from school. In walking together, the children were mentioned to be perceived as safer due to the idea that there is safety in numbers. Through deep interpretation, the sub-theme of caregiver's not having confidence in their child's ability to use AT could be connected to knowledge gaps that exist on how to safely engage in AT. If this gap was filled by teaching families how to use AT through the school system, the number of those taking part in AT could increase as caregiver confidence in their child's ability to use AT safely has also increased.

5.1.4 Individual and Interpersonal Levels

Connections can be made to internalized racism, as racialized children and their caregivers may believe in or be influenced by the stereotypes or racist ideology held about their specific racial identity (Chavis & Johnson, 2023). This internalized racism, can further impact a family's comfort with and desire to engage in AT, as racialized

youth and caregivers expect to receive racist treatment. This can be seen from dyads through the fears discussed regarding being racially profiled as a criminal or as neglectful. That racialized individuals can be misidentified and persecuted despite them not engaging in criminal or illegal activity. These thoughts and fears were mainly expressed by those participants who identified as Black, following in line with the literature (Chavis & Johnson, 2023). By five years old, Black children begin to understand that some races are inferior to others, and within a few years will believe the racist stereotypes about their own race (Chavis & Johnson, 2023). This learned inferiority along with inherent white privilege significantly impact the health and wellbeing of racialized youth, particularly Black of African Nova Scotian youth.

White power/privilege impacts racialized youth in individual and interpersonal ways. As most individuals only recognize that racialized people are disadvantaged when compared to their peers, and not that their white peers are overprivileged, racialized people get centered into the problem (Cory, 2021; Ford & Airhihenbuwa, 2010). With racialized people being under the surveillance of their neighbours and other community members. White people aren't brought into this conversation, even though their privilege is the crux of the problem, and that real change cannot occur until they are brought into the work on racial equity (McIntosh, 2003). We can see an example of this through the experience of racism discussed by one of the child participants, where they were unable to discuss the situation with their white friends after the fact. It became a type of taboo topic that just wasn't brought up unless the child was with their other racialized friends who had witnessed the event. This distancing from the racism compounds the negative impacts of the experience on the racialized youth, as they can begin to internalize that

racism and not be sure that their friends share the same values and beliefs on the topic (McIntosh, 2003; Sanders, 1999). In creating a space where racist experiences are freely discussed and challenged, there is a chance to display the importance of breaking down this privilege, so that white people take an action-oriented approach rather than an approach of ignorance.

Racialized women and girls also experience increased violence compared to their white peers (Sharma et al., 2020). When discussing such occurrences of violence, a greater focus is placed on the child being a potential victim of a violent encounter, while the perpetrator of the violence doesn't face many negative consequences for their actions unless they are caught by police. This lack of action being taken to protect racialized girls has led to increased sheltering of girls and women, as the only available solution to this problem. The brunt of the impact of these violent encounters continues to be placed on the shoulders of the child, which reinforces the cyclical nature of such violence as the true problem is not being addressed. If more females engaged with AT, this could be a potential increase in their sense of safety due to larger numbers and a confidence to fight back if they were to encounter a violent individual. There would also be a shift, as a new solution would have to be created to reduce this violence, as women and girls continue to engage with AT rather than sheltering, the negative impacts would have to shift to the perpetrator instead.

5.2 Addressing the Needs of Unheard Racially Segregated Communities

Throughout this thesis, it has been clear that the voices of African Nova Scotian people seem to go unheard by those individuals who are in positions to make positive change and support these neglected and forgotten communities. This is a significant

oversight of these change-makers within the Nova Scotian government as this population has faced significant challenges and health inequities as a result of slavery, war, forced segregation, intergenerational trauma, lack of resources, and racism (White et al., 2012; Whitfield, 2003). African Nova Scotian study participants discussed these feelings of being forgotten, and how they have had to fight and advocate for years on each issue before receiving any governmental support. As the land that they were forced to settle on was quite harsh, there is a number of challenges with the built environment that impact the communities' ability to engage in AT (Whitfield, 2003). Such challenges include the lack of sidewalks and crosswalks throughout the community, deadly road speeds within the community, and the lack of public transit connecting these communities with the rest of the province. There is a real need to address these built environment issues, as community members are engaging in AT when they must and are doing so in the poor and dangerous conditions.

There is also a lack of funding and support given for community members to come together and create and facilitate programming that is focused on promoting health. It can be seen from the example with the informal walking group that was created, there is a need for government funding to maintain such upstream programming, especially due to the low SES that many African Nova Scotian community members have as a result of governmental racism and forced segregation.

5.3 Building Community Capacity Through Collectivism

Racialized families are very family oriented and often value collectivism over individualism (Beckley et al., 2008; Birgel et al., 2023; Jiao & Zhao, 2023). By working with these collectivistic communities to build up the community's capacity, holistic

health throughout the community can be enhanced (Beckley et al., 2008; Birgel et al., 2023). Areas of improvement found within this thesis include a need to educate communities on AT benefits and PA guidelines so that they know to incorporate more movement into their day and develop family/community-wide strategies for increasing movement. Falling within these strategies is the recommendation that caregivers role model positive health behaviours for their families. The literature supports this role modelling in the health behaviours as youth are more likely to engage in the advised behaviour when co-participating rather than just receiving a lecture on the topic (Brand et al., 2020). Though the literature found differences in the success of role modelling due to gender differences of child to caregiver (Brand et al., 2020), no such differences were found in this study. Empowering youth to engage in AT independently or with their peers was also found as an enabler for increased AT participation. This is connected to a desire to develop independence and individuality, as from the age of 7-15 years old youth are beginning to travel independently and grow as people outside of their family units (Larouche et al., 2023). Finally, increased opportunities for community-wide engagement was seen as an enabler, as the community has the chance to get to know one another and develop relationships and a network (Beckley et al., 2008). As individuals develop that connection with each other, they can create programming for AT and PA such as community walking groups. Placing a focus on building community capacity, can have significant positive impacts on AT engagement and more.

In looking at the three meta-stories presented from this work, we can see that the third *family that walks and bikes together* is the ideal narrative, as both members of the dyad are able to reap the benefits of AT while also improving their caregiver/child

relationship. These benefits were also seen within the literature, as Brand et al. (2020) explored how mothers could influence AT participation through role modelling. Through improving their child/caregiver relationship, the child's acculturation strategy chosen can be more healthy, leading to increased feelings of belonging within one's community (Berry & Hou, 2016; Echeverría et al., 2015).

If the number of community members engaging in AT increases, there can be a reduction in vehicle traffic leading to increased physical safety on and around the road (Kunaratnam et al., 2022). This can reduce the negative impacts of the built environment as there are less vehicles on the road that can cause harm and damage to pedestrians.

5.4 Research Significance and Implications

This study has great significance as it has shared the voices of individuals who have often been pushed to the edges of society, literally so in the case of the racial segregation of African Nova Scotian people. In reviewing the literature, it was clear that there were gaps in relation to AT strategy and policies meeting the needs of racialized people in NS. This study presented many actionable needs held by this population in regard to AT engagement. Additionally, there were needs connected to reducing racist societal perceptions. Research findings will be shared with participants, the CoM Evaluation Team and the governmental funder, the Department of Communities, Culture, Tourism, and Heritage, in addition to organizations that work for and with racialized and African Nova Scotian people, policy makers, health promoters, and other health professionals.

5.4.1 Implication for AT Policy

As federal and provincial policy is looking to increase AT and improve the health and wellbeing of racialized people, it is imperative that these policies be developed with evidence-based information as to the needs of these communities. The voices and experiences of racialized people, especially African Nova Scotian people have been largely ignored during policy development due to systemic racism and inequalities. As the populations of racialized people within NS increases, there is a great need to recognize these voices in policy and to develop informed and culturally appropriate interventions to improve the health of these communities. The following recommendations are based on the results of this study:

- **Actively Addressing the Needs of Racialized Communities:** There is deep need to connect with racially segregated communities, like the African Nova Scotian communities, and ask them about their needs. As these racialized individuals have been excluded from policy development for so long, there is a need to elevate racialized people into change making roles so that they can share the perspectives of groups like the African Nova Scotians throughout the decision-making process.
Recommendations: (1) Empower invested racialized community members into decision-making roles, (2) hear multiple, diverse perspectives throughout the community to inform policy change/development, and (3) partner with relevant community organizations and initiatives to build trust with the racialized communities.
- **Developing Community Capacity:** There is a need to ensure that racialized communities, and communities that racialized people live within, have all the

various resources that they need to promote and maintain community-wide health. This includes a health-supportive built environment. The addition of sidewalks, crosswalks, bicycle lanes, walking paths, paved roads, traffic lights, traffic speed cameras, and reduced speed school/playground zones would support community-wide movement and AT engagement. Additionally, the development of indoor and outdoor recreation spaces can further increase community capacity and PA.

Recommendations: (1) Invest in the development of safe pedestrian infrastructure in racially segregated communities, (2) develop healthy community spaces by improving the amount of green space for outdoor recreation, and (3) develop indoor infrastructure so that communities can engage in movement all year long.

- **Supporting and Funding Racialized Communities:** There is a need for increased government funding, grants, and the like focused on improving the health of racialized people. In this study, it was clear that racialized communities don't receive adequate resources through which they can promote the health of their people. There are few to no programs and initiatives that are accessible and target the needs of these communities. This increased support and funding is especially important for families who identify that they can't participate in AT due to governmental neglect, and families where the next generation is engaging in AT despite the safety concerns. **Recommendations:** (1) Conduct a needs assessment to determine the strengths, barriers, and needs of racialized communities to determine where funding should be provided, (2) fund community organizations and empower individuals that are working to promote health and

wellbeing in these racialized communities, and (3) develop divided bike lanes throughout the HRM, and more largely across NS, and provide education about biking on the road to children and their caregivers so that they can feel more prepared and travel safely.

5.4.2 *Implication for Health Promoters and Change Makers*

Health promotion is preventative health that takes into account one's standard of living, working conditions, education, PA, culture, leisure and recreation engagement, relationships and networks, etc. (Kumar & Preetha, 2012). Health promoters and change makers are individuals who identify all the factors that impact health and work to develop a culturally appropriate and informed approach to assessing the health of the community, developing health strategies, implementing said strategies, and evaluating the effectiveness of that strategy. The following are recommendations for health promoters and change makers as it relates to racialized communities in NS:

- **Centering Racialized Voices:** There is a need to center racialized people and their voices within any health promotional work looking to improve the health and wellbeing of racialized communities. Empowering racialized people to become health promoters or bringing racialized people in as consultants or community partners to ensure that racialized voices are a central component to all stages of the health promotional work. **Recommendations:** (1) Empower community members to step up as community representatives/advocates at the beginning of the health promotional process, (2) ensure that community members can share concerns, thoughts/feedback, critiques, etc. with the team of health promoters.

- **Unpack Your Privilege (white or otherwise):** When working with racialized communities, there is a need to reflect and break down your own privileges regarding race, gender identity, sexual orientation, age, etc. In positioning your privileges and biases in relation to the racialized community that you are working with, you can better understand and relate to the population as you work to limit the impact of your biases in your work. This goes hand in hand with centering racialized voices on the issue, as you want to ensure that the needs of the population are being addressed as would best benefit the racialized community.

Recommendations: (1) Reflect and consider how your identity and position influences how you engage with racialized communities.
- **Family/Community-Centered Health Promotion:** Racialized communities are collectivistic, with family and community being the core of one's identity. When working with racialized people, there is a need to consider how the family unit engages with one another and their level of social connectedness. Health promotional services should focus on the entire family unit, so that services support the health and wellbeing of all family members. In looking at work on AT, there is a need to direct programming starting with education on the benefits of AT and PA guidelines so that there is a foundational base to work from and build up from. **Recommendations:** (1) Connect with every member of the family unit to plan, develop, implement, and evaluate the health promotional strategy.

5.5 Strengths and Limitations

In recruiting eight dyads/triads and conducting 18 interviews, there were a few diverse perspectives and experiences shared, as can be seen from the meta-stories

described in section 4.7 of this thesis. This diversity included both male and female children and caregivers, a variety of participant ages, four different racial identities, those living within urban and rural HRM, and both those who identify as Canadian citizens and immigrants. This diversity of participants increases the strength of these findings as many of the experiences were shared across the different racial identities. Through recruiting dyads/triads, this analysis included two/three perspectives within the same family unit. These multiple perspectives allowed for additional interpretation into AT experiences of these racialized youth. An unintended strength of interviewing two triads enabled further understanding and reflection upon the differences between the experiences of boys and girls, as well as the impact of age differences on AT access.

As study recruitment was done with support from community organizations that work with racialized people, we were able to increase the sense of trust and safety that our participants felt when engaging in this work. These community connections will also be supportive when this work is continued in the future.

The fact that I self-identify as racialized enhanced both the study design and analysis, as I was able to use my own lived experiences, and the lived experiences of other racialized people within my social circle to ensure that study methodology was selected with these cultural considerations in mind. Increased rapport was also able to be built with research participants, potentially leading to greater trust and increased sharing of lived experiences. During the analysis, my lived experience and knowledge also supported in providing further validation and context as themes were discovered and defined from the data. Interpretation was also strengthened and deepened by this additional context.

Though recruitment was listed as a strength, there were limitations as not all racial groups were represented, and only those living within the HRM were interviewed. The transferability of these findings is thus limited, though the perspectives of those living within both rural and urban communities within the HRM were recruited. In regards to informing AT strategies within the HRM, this study's recruitment can be seen as a strength.

Another limitation is related to the allowance for interviews to be conducted online. Though this increased the diversity of the participants, there was reduced rapport built with the interviewees and the potential for missed non-verbal communication and general body language. One dyad/triad participated in the interview without their camera on, leading to a complete lack of insight into their body language during the interview. In contrast, the interviews with the dyad/triad who participated in person were by far the most descriptive and longest of the interviews conducted. This could be due to the fact that I had the participant's full attention as I was able to control the interview environment and reduce distractions while still maintaining an informal and comfortable atmosphere. The children in this dyad/triad were additionally able to ease tension and limit boredom as they drew a picture or played around with the pens during the interview.

Finally, the English language requirement was a limitation as it prevented the participation of those with limited English fluency. This was a barrier that came up during recruitment, as one caregiver wasn't able to participate in the study due to their English skills. Further families may have also been discouraged from participating due to this requirement.

5.6 Future Directions

This work shared the voices and experiences of racialized children and their caregivers, leading to a greater understanding of how these children are engaging with AT. In developing this understanding, several gaps were found in the literature, presenting the need for further research being done to truly understand the experiences of racialized youth and their caregivers.

Firstly, as the recruitment strategy used within this work was not the original one proposed, there is still a need to gather the experiences of racialized youth living within the communities identified by the Make Your Move initiative to support the development of this initiative and of the CoM evaluation project. Additionally, the voices of those living in other geographic regions beyond these could provide insight into whether the same access and engagement to AT is experienced all over the province.

Other recommendations for future recruitment would be to not limit the inclusion criteria by requiring fluent English. Though there is the added complexity of needing qualified translators, this is an entire demographic of the racialized experience within NS that this study was unable to explore. It is estimated that there are 3030 racialized people living in this province who cannot speak English or French (Government of Canada, 2022).

I also recommend that for future work in which child and caregiver dyads are interviewed, an effort should be made to conduct the interviews in person, as the additional context and rapport built through in-person interviews is extremely valuable. Especially when interviewing racialized people, as there is usually more distrust to overcome. Having the data collection and analysis stages conducted by a researcher who

also self-identifies as racialized increases the rapport built during the interview, as the interviewee could see them as more of a peer or as someone who might share similar life experiences. These same factors allow for increased interpretation and understanding of the data collected. Due to the young age of these child participants, I would also recommend a different format of data collection to be used when interviewing them. One such option could be through play-based interviews, where some form of play or recreation activity is engaged with during the interviews. This could allow for the child to feel less that they are the center of everyone's interest. They could build up a better rapport with the interviewer through this activity participation leading to increased sharing of lived experiences and stories.

Chapter 6: Conclusion

6.1 Reflections

The journey of developing this thesis was a roller-coaster fraught with highs and lows as I worked to understand how to best approach the research process and build the foundation for my identity as a researcher. The importance of this work and the need to accurately and authentically represent the voices of racialized youth and their caregivers weighed heavily on me throughout this process, leading to days where I would fall into the flow of analysis and writing, and other days where I deleted a week of work and started writing an entire chapter again. My confidence in my abilities as a researcher is something that I have had to nurture and be kind to throughout this process due to the scale and breadth of this work. I am very thankful to all of the dyads who shared their lived experiences with me and trusted me to tell their stories. I am especially thankful to the African Nova Scotian people who took the time to be kind and educate me on their history and lived experiences, as I regret to state that I didn't know about their unique history in Canada till I moved into the province two years ago.

In looking at my positionality, I come to this work as a racialized person who understands and acknowledges my unique perspectives and experiences as just that, my understanding of the racialized experience. There are similarities and differences in my experiences of growing up and living on the west coast of Canada, the experiences of African Nova Scotian youth who have grown up in NS, and the experiences of racialized youth whose families immigrated to the east coast and have lived here for most of their lives. The main benefit that my racial identity brings to this work is a passion and care for

these vulnerable populations, as well as a deep understanding of the need for such important work. I hope that this passion and care came across to all the participants.

In going back to the beginning and looking at how I became engaged in this work, I have had to reflect and consider how I move to further work in the future. I fell into this work due to my involvement in the CoM evaluation project and interest in working with and exploring racialized people's lived experiences. Though I do know that this is only the beginning of some very powerful work, I also recognize that I am coming to the end of this chapter of my research journey, as I start a PhD in Public Health at the University of Alberta in the fall. Though I have to step away from this project, I know that I am a researcher who is very interested in further exploring the impact of racial identity of quality of life. As a researcher who is racialized myself, I have the ability to bring additional perspectives and insight into this work, which is in itself a motivator.

Thinking about the big picture of this thesis work, and my hopes for how this it continues into the future, I am hopeful about its potential to increase AT engagement and PA for racialized youth. As the Make Your Move initiative continues throughout NS, these findings will be shared with the Department of Communities, Culture, Tourism, and Heritage, who could incorporate the action items and recommendations found through this work. In sharing the findings with this government partner, the awareness that will be developed regarding the needs of African Nova Scotian youth in particular has the potential to result in governmental change and addressing of the government's role in perpetuating systemic racism.

6.2 Conclusions

Racialized children living within NS and their caregivers experience unique barriers to AT engagement based on their family dynamic. Fears impacting AT participation connected to incorrect racial profiling and being misidentified as a criminal, being viewed as a negligent caregiver, and additional fears connected to other pieces of one's intersectional identity. Living within a racially segregated community was an additional factor, as African Nova Scotian people largely live within segregated communities as a result of systemic racism. These individuals are challenged by the inconducive built environment, low SES, and a lack of governmental support and concern. Community and collectivism were seen as enablers of AT, as strategies that include the entire family or entire community were seen to be most effective at increasing movement and PA. Empowering racialized youth to take charge of their health and grow in independence was also seen as a factor that leads to an increase in AT.

Different dyad relationships were also identified through this work, providing additional context to health promoters and change makers about the specific strategies to be employing in regard to the type of family they encounter. Each of these example narratives had differences in relation to how they engaged with AT. The three narratives found included a family where neither caregiver nor child engaged in AT, a family where the child engaged in AT, but the caregiver did not, and a family where both caregiver and child participated in AT. The findings and narrative meta-stories provide good context for engaging with racialized communities and trying to increase their AT.

Finally, this study presents policy and health promotion recommendations that inform a health promotional strategy for increasing the health of racialized youth through

AT engagement. The context of working with either African Nova Scotian people, or South Asian immigrants added to the usability of this thesis to inform future health promotional work and stress the need for conducting such work to improve these racialized communities.

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Appendix A: Dalhousie REB Approval Letter



Social Sciences & Humanities Research Ethics Board Letter of Approval

October 20, 2023

Simran Bhamra
Health\School of Health and Human Performance

Dear Simran,

REB #: 2023-6741
Project Title: Investigating the Lived Experience of Racialized Youth with Active Transportation in Nova Scotia
Effective Date: October 20, 2023
Expiry Date: October 20, 2024

The Social Sciences & Humanities Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Sincerely,



Dr. John Cameron
Chair, Social Sciences and Humanities Research Ethics Board
Dalhousie University

Appendix B: Recruitment Poster

Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia



**Participate in
our research
study!**

WE ARE INVESTIGATING:

Active transportation of racialized youth in Nova Scotia. We want to gain youth and caregiver perspectives regarding barriers and enablers to active transportation participation among racialized youth in Nova Scotia. These findings may inform culturally responsive strategies.

BOTH CAREGIVER AND YOUTH WILL BE ASKED TO:

- Consent to participate in interviews.
- Participate in 60-90 minute interviews (online or in-person).

THE INTERVIEW WILL:

- Discuss barriers and enablers to active transportation among racialized youth.

PARTICIPATION ELIGIBILITY:

- **Youth:** must be a self-identified racialized youth aged 7-15 years old.
- **Caregiver:** must have been the primary caregiver of the racialized youth for at least one year.
- **Both:** must have lived in Nova Scotia for at least a year prior to research participation.

\$25 compensation after each interview.

For more information or if you are interested in participating in this study please contact Simran.Bhamra@dal.ca

Dalhousie REB # 2023-6741



Appendix C: Information Letter

Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia

I would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done, and what it would involve on your behalf. Please take time to review the following information carefully. Do not hesitate to ask questions if anything is not clear or if you would like more information.

Introduction

My name is Simran Bhamra. I am a second-year master's student at Dalhousie University in their graduate-level Health Promotion Program. I am kindly requesting participation in a research study that I am conducting titled: Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia. The intention of this study is to explore facilitators and enablers to active transportation engagement of racialized youth and their caregivers living in Nova Scotia.

Explanation of Procedures

This study involves the participation of racialized youth and their caregivers who are living in Nova Scotia. Each caregiver and child will be asked to take part in a separate interview facilitated by the primary researcher. Interviews will be conducted either in the community of the participant's residence, in a private space, or online via a secure video/teleconference platform (i.e., Microsoft Teams). Each interview will be approximately 60-90 minutes and will be relatively informal. We recognize that this is a large time commitment, so if needed, adult supervision of the participating child by a member of our research team (who has completed a recent criminal record check) is available.

All interviews will be audio-recorded for the purpose of data collection and analysis. The primary researcher will take field notes during the interview process. Participation is completely voluntary, and you may withdraw at any time without consequence, up until 2 weeks after your interview. You have the right to refuse to answer any question you may be asked during this study.

Confidentiality

The information gathered during this study will remain anonymous and confidential in secure premises during the entire duration of this project. All identifying information will be kept by the primary researcher and not disclosed to anyone besides the research team. There will be no identifying information released; they will be coded in the final report. Signed consent forms and original audio-recordings will be stored safely until the completion of the study. All data will be destroyed 1 year following the completion of this study. The results of this research will be published as a researcher paper, and infographics, and potentially in a professional journal or presented at professional meetings.

Risks and Discomforts

There are minimal risks or discomforts that are anticipated from your participation in this study. Potential risks or discomforts may include possible psychological distress, emotional feelings or sadness when asked questions during the interview. You will be provided with a resource list after participating that includes tailored services for racialized Canadians.

Benefits

No direct benefits are anticipated from your participation in this study, though the following indirect benefits may be experienced. These include the opportunity to discuss feelings, perceptions, barriers and facilitators as it relates to physical activity and other health-promoting behaviours of racialized youth living in Nova Scotia. Participation may contribute to the development and implementation of culturally informed physical activity and active transportation interventions that promote health and equality.

Further Information

You are welcome to ask the researcher any questions at any time, including any that may occur during the interview. If you have any questions once the interview is complete, you may contact the researcher or their supervisor using the information provided below.

Researcher Contact Information

Simran Bhamra, MA Health Promotion Candidate

Faculty Supervisor Contact Information

Dr. Sarah A. Moore, Ph.D.

Appendix D: Caregiver Interview Guide

Interview Guide – Caregiver

Note: The following are questions that are intended to serve as a framework for the interviews. The interview questions may change given the direction of the interview.

Interview Script

Hello, my name is Simran. I use the pronouns she, her, and hers. I will be interviewing you today. Thank you for agreeing to chat with me, it's nice to meet you. The format of the interview will be informal. I will be asking you a series of questions related to your and your child's active transportation engagement to support my study.

Go through consent form and reaffirm consent:

Do you have any questions before we begin the interview? Yes No

Do you consent to participate in this interview? Yes No

As the caregiver of [their child that is taking part in the study], does this individual have your consent to participate in their interview? Yes No

And do I have your permission to audio-record this interview? Yes No

(Only if no) Do I have permission to take notes during this interview? Yes No

Do I have permission to use anything you say as a quote in any of the research reports or other types of knowledge translation materials (this may include conference presentations, infographics, and other such things)? And just as a reminder, you will not be personally identified in the quote. Yes No

Before we start, I would like to reiterate that if you feel uncomfortable with any of these questions you can simply say skip and I will move to the next question. To start I would like to clarify your name again.

1. Is this name how you would like for me to refer to you, or is there another name you would feel more comfortable with?
2. Also, which pronouns would you be most comfortable with me using to refer to you today?

Engagement Questions:

Now we will move into questions about your physical activity participation and values about physical activity.

1. What does physical activity mean to you?
2. Canada has physical activity guidelines. Do you know what they are for your age group? What are they? *Guideline for adults 18-64: 150 min/week of moderate to vigorous activity, no more than 3 hours of recreational screen time.*
 - a. Do you think that you meet these guidelines? Why or why not?

3. Do you know what the physical activity guidelines are for your child's age group? What are they? *Guideline for children: 60 min/day of moderate to vigorous activity. No more than 2 hours/day of screen time.*
 - a. Do you think that they are meeting these guidelines? Why or why not?
4. How important do you think it is to participate in physical activity?
5. Do you know what active transportation is?
6. What do you know about it, or what do you think it could be?

For the purpose of this study, we define active transportation as any human-powered transportation, including, but not limited to walking, wheeling, or cycling. It has been identified as a leading strategy to improve physical activity as it is a low-barrier activity that can be added to people's everyday routine.

7. Do you currently engage in active transportation?
 - a. If yes, please describe what this looks like.
8. Have you engaged in active transportation in the past?
 - a. If yes, please describe what this looked like.
9. Does your child engage in active transportation?
 - a. If yes, please describe what this looks like.
10. Do you think active transportation engagement would improve yours' or your child's health?
11. What are some factors that you think may prevent your child from engaging in active transportation?
 - a. Personal
 - b. Community
12. What are some things that might enable/motivate them to participate in active transportation?
 - a. Personal
 - b. Community
13. How do you think being a racialized person impact's your child's engagement in active transportation?
14. Do you feel safe walking around your community?
15. Would you feel safe having your child walk on their own or with their friends around your community (without adults)? Why or why not?
16. Do you think that you will increase yours' or your child's active transportation engagement in the next 6 months?
 - a. If yes, how will you do this?
 - b. If no, why?

Strategies and Recommendations Questions:

1. What do you think are potential strategies for increasing active transportation in your community?
 - a. In general?
 - b. Specific to children?
 - c. Specific to racialized children?

2. Have you heard of any initiatives or programs that are working to increase active transportation in your community?
3. Have you ever lived in a different area?
 - a. If yes, do you think it was easier to take part in active transportation there? Why or why not?
 - b. If no, move to next questions.

More Extensive Demographic Questions (only ask questions that were not already asked during screening unless they didn't go through screening ie. I knew them personally and knew they were eligible):

1. How old are you?
2. How old is your child?
3. What racial identity do you identify by? What identity does your child identify by?
4. Do you live in the same house as your child that is participating in this study?
5. Are you a Canadian citizen?
 - a. If yes, may I ask how many generations has your family lived in Canada?
 - b. If no, may I ask how do you identify?
6. What is your first language or the language you understand most?
7. [If caregiver self-identifies as racialized] Do you identify more with your racial identity or with a Canadian Identity?
8. If you don't mind me asking, what gender identity do you most identify with?

Closing:

1. Could you tell me if there is anything I should know about your child before interviewing them that could support my facilitation of the interview process with them?
2. Is there anything else that you would like to talk about that we didn't get the chance to cover today?

Thank you for taking the time to complete this interview today, and for your support with this study. We will be in touch regarding study findings and knowledge translation if you identified interest on the consent form.

Appendix E: Child Interview Guide

Interview Guide – Child

Note: The following are questions that are intended to serve as a framework for the interviews. The interview questions may change given the direction of the interview. The language used in the interview will also be on a case-by-case basis, with reduced jargon and complexity for younger children.

Interview Script

Hello, my name is Simran. I use the pronouns she, her, and hers. I will be interviewing you today. Thank you for agreeing to chat with me, it's nice to meet you. The format of the interview will be informal. I will be asking you a series of questions related to your active transportation engagement to support my study.

Go through consent form and reaffirm consent:

Do you have any questions before we begin the interview? Yes No

Do you agree to participate in this interview? Yes No

And do I have your permission to audio-record this interview? Yes No

(Only if no) Do I have permission to take notes during this interview? Yes No

Do I have permission to use anything you say as a quote in any of the research reports or other types of knowledge translation materials (knowledge translation is a fancy word for the methods of sharing the research results with other people, like a presentation or a graphic)? And just as a reminder, you will not be personally identified in the quote. So, no one will know it was you who said it.

Yes No

[Present art and sensory toys to the child.] These are some things that you can fiddle with while we talk so that you don't feel bored. Feel free to touch and play with them if you want. Any art that you might create is yours to keep and is not a part of this research project.

[Have toolkit of other resources prepared on an as needed basis]

Before we start, I want to say again, that if you feel uncomfortable with any of these questions you can simply say skip and I will move to the next question. Or if you want a break or want to end the interview that is ok, and you won't get in trouble, and I won't be angry.

1. I would like to double check that your name is [name]. Is this the name you would like me to use for this interview, or is there another name you would feel more comfortable with?

2. Also, which pronouns would you be most comfortable with me using to refer to you today?

Engagement Questions:

Now we will move into questions about your physical activity participation and values about physical activity.

1. What does physical activity mean to you?
2. Do you know what the physical activity guidelines are for your age group? What are they? *Guidelines: 60 min/day of activity that might make you sweat a little, things like running around, jumping around, playing a sport. No more than 2 hours/day of screen time.*
 - a. Do you think that you meet these guidelines? Why or why not?
3. How important do you think it is to participate in physical activity?
4. Do you know what active transportation is?
5. What do you know about it, or what do you think it could be?

Active transportation is any human-powered movement to get you from place to place, like walking or biking instead of taking a car. It can be a simple and easy way to add physical activity to your daily routine.

6. Do you currently engage in active transportation?
 - a. If yes, please describe what this looks like.
7. Have you used active transportation in the past?
 - a. If yes, please describe what this looked like.
8. Do you think active transportation engagement would improve your health?
9. What are some factors that might get in the way of you participating in active transportation?
10. What are some things that might get you to or help you to participate in active transportation?
11. How do you think your identity as [child's racial identity] impact's your active transportation engagement?
12. Do you feel safe walking around your community? Why or why not?
13. Do you have friends that engage in active transportation?
14. Would you like to increase your active transportation engagement?
15. Do you think that you will increase your active transportation engagement in the next 6 months?
 - a. If yes, how will you do this?
 - b. If no, why?

[Go through the answers from these questions to clarify responses.]

Strategies and Recommendations Questions:

1. What do you think are potential strategies for increasing active transportation in your community?
2. How can active transportation be increased for racialized children?

3. What would make you participate in active transportation more?
4. Have you heard of any other programs that are working to increase active transportation in your community or in your school?

[Go through the answers from these questions to clarify responses.]

More Extensive Demographic Questions:

1. Do you live in the same house as your caregiver who is participating in this study?
2. Do you have any siblings?
3. Are you a Canadian citizen?
 - a. If no, may I ask how do you identify?
4. What is your first language or the language you most understand?
5. Do you identify more as [child's racial identity] or as Canadian?
6. If you don't mind me asking, what gender identity do you most identify with?

[Go through the answers from these questions to clarify responses.]

Closing:

1. Is there anything else that you would like to talk about that we didn't get the chance to cover today?

Thank you for taking the time to complete this interview today, and for your support with this study. We will be sending the study results to your caregiver or directly to you if you have an email and if you checked that box on the consent form.

Appendix F: Consent Forms

CONSENT FORM (CAREGIVERS)

Project Title: Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia

Lead Researcher: Simran Bhamra

Affiliation: School of Health and Human Performance/Healthy Populations Institute, Dalhousie University

Email: Simran.Bhamra@dal.ca

Other Researchers:

Dr. Sarah Moore (supervisor), School of Health and Human Performance/Healthy Populations Institute, Dalhousie University, Sarah.Moore@dal.ca

Dr. Sara Kirk, School of Health and Human Performance/Healthy Populations Institute, Dalhousie University, Sara.Kirk@dal.ca

Emily Burke, School of Health and Human Performance/Healthy Populations Institute, Dalhousie University, em203652@dal.ca

Funding provided by: Province of Nova Scotia – Department of Communities, Culture, Tourism, and Heritage

Introduction

We invite you to take part in a research study being conducted by, Simran Bhamra, who is a student researcher at Dalhousie University. Choosing whether or not to take part in this research is entirely up to you. There will be no impact on your life if you decide not to participate in the research. The information below tells you about what is involved in the research, what you will be asked to do and about any benefit, risk, inconvenience or discomfort that you might experience.

You should discuss any questions you have about this study with the lead researcher, Simran Bhamra. Questions can be asked by email whenever they come up.

Purpose and Outline of the Research Study

The intention of this study is to develop an understanding of barriers and enablers that impact active transportation engagement by young, racialized Nova Scotians, and to explore potential recommendations for future planning of initiatives or policies. Active transportation is any human-powered transportation including but not limited to walking, wheeling, or cycling.

Who Can Take Part in the Research Study

Child: You may participate in this study if you self-identify as a racialized individual and are between the ages of 7-15 years old. In this study, we define racialized as any non-

Indigenous person who is non-Caucasian racially and doesn't identify as white in colour.
Caregiver: You may participate in this study if you have been the primary caregiver of the participant child for at least a year before the date of the interview.

All: You must all have sufficient English fluency to participate in the interview without the need of a translator and must have lived in the same community within Nova Scotia for at least a year before the start of the interview.

What You Will Be Asked to Do

If you decide to participate in this research, both caregiver and child will each be asked to attend one interview session in a confidential/private space within your community, or online via Microsoft Teams. Each interview will take approximately 1 hour to 1 ½ hours. During the interview you will be asked to answer questions regarding your physical activity participation and engagement in active transportation. The interviews will be audio-recorded and transcribed with all identifying information removed. You will also be given the opportunity to review this transcript to clarify the accuracy of the information.

We understand that this is a significant time commitment, and that you may require supervision of your child while you take part in your interview. We are offering the adult supervision of your participating child by a member of our research team for this time should you require it. This person has experience with children and has completed a recent criminal record check and a recent vulnerable sectors check.

Possible Benefits, Risks and Discomforts

Benefits: No direct benefits are expected from participation, though the following indirect benefits may be experienced. This includes the opportunity to reduce the knowledge gap on methods for increasing engagement in active transportation among racialized youth, as well as the sense of being seen and of having your thoughts and opinions heard. Participation may also contribute to the development and implementation of culturally responsive interventions to increase active transportation.

Risks: There are minimal risks or discomforts anticipated from your participation in this study. Potential risks or discomforts may include possible psychological or emotional discomfort when asked questions during the interview. You will be offered breaks to minimize the risk of fatigue during the interview. A resource sheet for culturally informed services will also be provided to each participant.

Compensation / Reimbursement

To thank you for your time, we will give you a e-gift card worth \$25 after your participation in the interview.

How Your Information Will Be Protected

Privacy: Your participation in this research will be known only to the lead researcher and your caregiver/child.

Confidentiality: The information that you provide will be kept confidential. Only the

research team at Dalhousie University will have access to this information. The people who work with us have an obligation to keep all research information confidential. All your identifying information (such as your name and contact information) will be kept by the lead researcher and securely stored separately from your research information. We will use a participant number (not your name) in our written and computer records so that the research information we have about you contains no names. During the study, all electronic records will be kept secure in an encrypted file on the researcher's password-protected computer. All paper records will be kept secure in a locked filing cabinet located in the researcher's office.

We will describe and share our findings from this study in a thesis, presentations, public media, infographics, and journal articles. We will only report group results and not individual results. This means that you will not be identified in any way in our reports.

Legal Obligations: We will not disclose any information about your participation except as required by law or our professional obligations. If you inform us about abuse or neglect of a child, we are required by law to contact authorities. If we notice that you are at an immediate risk of harming yourself or other people, we are required by our professional code of ethics to seek assistance.

Data Retention: All data will be destroyed one year following the completion of this study, and the students' submission of the final report.

If You Decide to Stop Participating

You are free to leave the study at any time. If you decide to stop participating during the study, you can decide whether you want any of the information that you have provided up to that point to be removed or if you will allow us to use that information. After participating in the study, you can decide for up to 2 weeks if you want us to remove your data. After that time, it will become impossible for us to remove it because it will already be analyzed and de-identified.

How to Obtain Results

We will provide you with a short description of group results when the study is finished. No individual results will be provided. You can obtain these results by including your contact information at the end of the signature page.

Questions

We are happy to talk with you about any questions or concerns you may have about your participation in this research study. Please contact Simran Bhamra (at Simran.Bhamra@dal.ca) or supervisor Sarah Moore at (778 828-7228, Sarah.Moore@dal.ca) at any time with questions, comments, or concerns about the research study.

If you have any ethical concerns about your participation in this research, you may also contact Research Ethics, Dalhousie University at (902) 494-3423, or email: ethics@dal.ca (and reference REB file # 2023-6741).

CONSENT FORM (CHILD)

This is a consent form. It's a document that gives you all the information that you need to make a decision about if you want to participate in this project or not. Some information in this form may be hard to understand, so you can ask your caregiver or the researcher to explain any part of it.

Project title: Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia

Lead researcher: Simran Bhamra

Affiliation: School of Health and Human Performance/Healthy Populations Institute, Dalhousie University

Email: Simran.Bhamra@dal.ca

Who are we?

My name is Simran Bhamra, and I am a student at Dalhousie University. I work in the School of Health and Human Performance.

Why are we meeting with you?

We want to tell you about a study that involves racialized Nova Scotian children. Racialized includes people who aren't Indigenous, aren't Caucasian, and aren't white.

We want to know more about your active transportation (a type of physical activity that gets you from place to place, like walking or biking).

Why are we doing this study?

We want to understand what might help you participate in active transportation, and what might get in the way of you participating in active transportation.

What will happen to you if you are in this study?

If you decide to take part in this study, you will be asked to participate in an interview (a sit-down talk) with me that will either be at a private location in your community, or online through Microsoft Teams. The interview will involve me asking you questions about your active transportation. It will take about an hour to an hour and a half.

Are there good things and bad things about this study?

What we find from this study will be used to support the creation of programs to increase active transportation of racialized children. As far as we know, being in this study will not hurt you and it will not make you feel bad.

Who will know that you are in this study?

The things that you say, and any information that you provide during the study will be kept confidential. This means that it will only be shared with me unless you give me permission to share it with other people. Any information about you that is shared with anyone will not have your name or identifying information attached, so no one will know

that they are your answers. If we feel that our research results would be supported with something you have said directly we will ask for permission first.

The researcher and research team will not let anyone other than themselves see your answers or any other information about you. Your caregiver, friends, or family will also never see the answers that you give or the information we may write about you.

The only time we would ever share information you tell us with other people would be if you told us someone was hurting you. We would only tell people that could help you because our priority is to make sure that you are safe, healthy, and happy. Also, it would be against the law to not share information about someone hurting you.

Do you have to be in the study?

You do not have to be in this study. No one will get angry, and you will not be punished for not participating. Just tell us that you don't want to be in the study. And if you decide that you want to be in the study, but change your mind at any time, you can tell us that you no longer want to be in the study, and we can stop.

Do you have any questions?

You can ask questions at any time. You can ask now, during the interview, or after the interview is done. You can talk to me at any time during the study. My contact information is below.

Simran Bhamra, School of Health and Human Performance,
Simran.Bhamra@dal.ca

Appendix G: Signature Pages

SIGNATURE PAGE (CAREGIVERS)

Project title: Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia

Lead researcher: Simran Bhamra

Affiliation: School of Health and Human Performance/Healthy Populations Institute, Dalhousie University

Email: Simran.Bhamra@dal.ca

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I understand that I have been asked to take part in an interview that will occur in a confidential/private location within my community, or via Microsoft Teams, and that those interviews will be audio-recorded. I understand that direct quotes of things I say may be used without identifying me. I agree to take part in this study. My participation is voluntary, and I understand that I am free to withdraw from the study at any time, until 2 weeks after my interview is complete.

Please select all that apply to you (you can still participate in the research if you select no):

I agree that my interview may be audio-recorded Yes
 No

(If no, notes will be taken to record data)

I agree that direct quotes from my interview may be used without identifying me Yes
 No

I agree to participate in this study, and that my participation is completely voluntary. I understand that I am free to withdraw at any time up to 2 weeks after my interview, and that all my information will be kept confidential unless otherwise required to do so by law.

Yes No

Signing below will consent for my child to participate in this study:

Name Signature Date

Signing below will consent for me to participate in this study:

Name Signature Date

Please provide an email address below if you would like to be sent a summary of the

study results.

Email address: _____

Please indicate if you require supervision of your participating child during your interview:

Yes No Not Applicable (virtual interview)

SIGNATURE PAGE (CHILD)

Project title: Exploring the Lived Experiences of Racialized Youth with Active Transportation in Nova Scotia

Lead researcher: Simran Bhamra

Affiliation: School of Health and Human Performance/Healthy Populations Institute, Dalhousie University

Email: Simran.Bhamra@dal.ca

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I understand that I have been asked to take part in an interview that will occur in a confidential/private location within my community, or via Microsoft Teams, and that those interviews will be audio-recorded. I understand that direct quotes of things I say may be used without identifying me. I agree to take part in this study. My participation is completely my own decision, and I understand that I am free to remove my participation from the study at any time, until 2 weeks after my interview is complete.

Please select all that apply to you (you can still participate in the research if you select no):

I agree that my interview may be audio-recorded Yes
No

(If no, notes will be taken to record data)

I agree that direct quotes from my interview may be used without identifying me Yes
No

I agree to participate in this study, and that my participation is completely my own decision. I understand that I am free to remove my participation at any time up to 2 weeks after my interview, and that all my information will be kept confidential unless otherwise required to do so by law.

Yes No

Signing below will consent for me to participate in this study:

Name Signature Date

Please provide an email address below if you would like to be sent a summary of the study results.

Email address: _____

Appendix H: Resource Sheet

Resource Sheet

Below is a list of resources available for racialized children and adults across Nova Scotia to support healthy living and increased physical activity. Please note that this list is non-exhaustive. More resources may exist within your community or have become available following the creation of this document. For the most up-to-date information we recommend contacting your local community leadership and health teams.

Mental Health/Wellness Resources:

- Canadian Mental Health Association Nova Scotia (CMHA NS)
 - <https://novascotia.cmha.ca/>
- Mental Health Foundation of Nova Scotia
 - <https://www.mentalhealthns.ca/find-support>
- Nova Scotia Health – Online Mental Wellness Resources
 - <https://library.nshealth.ca/HealthyLiving/mentalwellness>
- Black Youth Helpline
 - <https://blackyouth.ca/>
- Kids Help Phone
 - 1-800-668-6868
- Provincial Mental Health and Addictions Crisis Line
 - 1-888-429-8167

Healthy Living Resources:

- Health Association for African Canadians
 - <http://haac.ca/>
- Immigrant Services Association of Nova Scotia
 - <https://isans.ca/resources/strengthening-welcoming-and-inclusive-communities/>
- Mi'kmaw Kina'matnewey
 - <https://www.kinu.ca/>

Physical Activity Resources:

- Canadian Sport Institute Atlantic
 - <https://csiatlantic.ca/>
- Nova Scotia Health – Online Physical Activity Resources
 - <https://library.nshealth.ca/HealthyLiving/physicalactivity#s-lg-box-16075605>
- NS Sport and Recreation Anti-Racism Week Campaign
 - <https://www.showuptospeakup.ca/>
- ParticipACTION
 - <https://www.participaction.com/>
- Recreation Nova Scotia
 - <https://www.recreationns.ns.ca/>
- Sport Nova Scotia - Funding
 - <https://sportnovascotia.ca/funding-programs-and-eligibility/>

Appendix I: Braun and Clarke's 15-Point Checklist for Good Reflexive TA

Table 1: Braun and Clarke's 15-Point Checklist for Good Reflexive TA.

No.	Process	Criteria
1	Transcription	The data have been transcribed to an appropriate level of detail; All transcripts have been checked against the original recordings for 'accuracy'.
2	Coding and theme development	Each data item has been given thorough and repeated attention in the coding process.
3		The coding process has been thorough, inclusive and comprehensive; themes have not been developed from a few vivid examples (an anecdotal approach).
4		All relevant extracts for each theme have been collated.
5		Candidate themes have been checked against code data and back to the original dataset.
6		Themes are internally coherent, consistent, and distinctive; each theme contains a well-defined organizing concept; Any subthemes share the central organizing concept of the theme.
7		Analysis and interpretation – in the written report
8	Analysis and data match each other - the extracts evidence the analytic claims.	
9	Analysis tells a convincing and well-organized story about the data and topic; Analysis addresses the research question.	
10	An appropriate balance between analytic narrative and data extracts is provided.	
11	Overall	Enough time has been allocated to complete all phases of the analysis adequately without rushing phase, or giving it a once-over-lightly (including returning to earlier phases or redoing the analysis if need be).
12	Written Report	The specific approach to thematic analysis, and the particulars of the approach, including theoretical positions and assumptions, are clearly explicated.
13		There is a good fit between what was claimed, and what was done – i.e. the described method and reported analysis are consistent.
14		The language and concepts used in the report are consistent with the ontological and epistemological positions of the analysis.
15		The researcher is positioned as <i>active</i> in the research process; Themes do not just 'emerge'.

Appendix J: Visual Coding Map

