ENVIRONMENTAL INJUSTICES EXPERIENCED BY IMMIGRANTS IN A HIGH-RISE NEIGHBOURHOOD: EXAMINING CONDITIONS, IMPACTS, AND ADVOCACY AT MULTIPLE SCALES

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ABSTRACT

Low-income, racialized, immigrant populations often experience inequitable exposure to hazardous housing and neighbourhood environments, while being excluded from decision-making processes that shape environmental changes in these spaces. While such trends have been documented in several locations, few studies explore the issue in-depth, from the perspective of the lived experiences of immigrants and newcomers facing substandard conditions across a variety of scales. Drawing on focus groups with immigrants living in the high-rise neighbourhood of Rexdale, Toronto and key informant interviews with social service agencies, this thesis examines how unjust environmental living conditions manifest across multiple scales (i.e. housing unit, high-rise building, high-rise neighbourhood), resulting in cumulative impacts and challenges. A procedural environmental justice lens is adopted to examine whether and how immigrants and newcomers are engaging in processes to improve their living conditions at a variety of scales, related obstacles and barriers, and opportunities for increasing immigrant influence over environmental conditions.

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1. CHAPTER ONE: INTRODUCTION

1.1 FORMAT OF THESIS

This is a manuscript-style thesis comprised of one paper that is being prepared for submission to the *Journal of Housing and the Built Environment* (Chapter Two) and one paper that has been submitted to *Local Environment* (Chapter Three). Chapter One serves as an introduction to the thesis and details the contributions of the manuscripts' authors. Further, it discusses environmental justice theory, the theoretical concept that has guided this research and analysis, and states the thesis objectives. The objective of Chapter Two (Manuscript 1) is to document housing and neighbourhood environmental conditions through an in-depth account of the lived experiences of immigrants and newcomers residing in a high-rise neighbourhood. The intent is to qualitatively explore in-depth how environmental conditions and related impacts at the housing scale are nested within environmental conditions and impacts at the neighbourhood scale. This paper elucidates how individuals and their immigrant families may endure multiple hazards and unhealthy conditions simultaneously, at a variety of scales. Further, unjust conditions at the housing or building scale can interact with unjust dynamics and conditions at the neighbourhood scale.

Chapter Three (Manuscript 2) adopts a procedural environmental justice lens to examine the factors that enable and constrain immigrants and newcomers from taking action to improve their environmental living conditions at multiple scales (i.e. high-rise housing units, high-rise buildings, and neighbourhood). Chapter Three also documents procedural injustices that prevent action, in addition to offering a solution-based orientation through identifying successful outcomes from self-advocacy, community initiatives and activism. Our findings reveal that existing procedures and systems for improving environmental conditions at each scale are not inclusive and do not take into account the needs of the most vulnerable or marginalized immigrant sub-populations. Despite existing procedural injustices and barriers, many immigrants and newcomers either individually and/or through collective community action, are making positive changes to their environments. Chapter Four offers conclusions and policy implications resulting from the thesis as a whole, as well as limitations and recommendations for future research.

1.2 Contributions of Authors

For the manuscripts in Chapters Two and Three, Drs. Sara Edge, Sutama Ghosh and Ann Marie Murnaghan are co-authors. Drs. Sara Edge, Sutama Ghosh and Ann Marie Murnaghan applied for, and received, the grant that enabled this research, which included establishing the scope and methodology of the research project. Dr. Sutama Ghosh had a pre-existing relationship with Rexdale Women's Centre, which provided an important community partnership that aided in the recruitment process for the first focus group in addition to providing space for a Community Knowledge Sharing Workshop in which myself and all members of the research team participated. Drs. Sara Edge and Sutama Ghosh facilitated the first focus group, and Dr. Edge conducted three of the first key informant interviews. I was responsible for the recruitment of the 20 remaining key informants that were interviewed over the course of eight key informant interviews (including three group interviews). I also assisted with the facilitation of the second focus group under Dr. Edge's supervision. I played a lead role in establishing a partnership with an additional community partner, the North Etobicoke Residents' Council, that is supported by a City of Toronto staff who assisted in recruiting participants through the Council's membership and networks for the second focus group. I transcribed all audio recordings of interview and focus group data, with the exception of the first focus group, which was completed by a research assistant and Dr. Sutama Ghosh, due to translation needs. I also organized and thematically analysed interview and focus group transcripts using NVivo Qualitative Analysis Software. I did the majority of the writing for each manuscript, with Dr. Sara Edge providing ongoing supervision, consultation, comprehensive feedback and edits. Drs. Sutama Ghosh and Ann Marie Murnaghan provided valuable input on Manuscript 2. Additionally, they were responsible for a temporal spatial analysis of development, investment, and dis-investment in the case-study area. However, this particular component of the study is outside of the scope of this thesis and not reflected in its contents.

1.3 Overview

1.3.1 RESEARCH PROBLEM

Since the emergence of environmental justice movements and initial studies on waste siting, a great number of academic studies have focused on environmental justice issues

(Mohai, Pellow and Roberts 2009). While environmental justice has been defined in a multitude of ways, "Robert Bullard defined environmental justice as the principle that 'all people and communities are entitled to equal protection of environmental and public health laws and regulations'" (Mohai, Pellow and Roberts 2009, 407). Although environmental justice literature has become more common in Canada in the past few decades, and recently, has intersected with critical theory in a variety of ways, gaps in the literature remain (Haluza-Delay 2007; Teelucksingh 2007).

Scholars suggest environmental justice issues in Canada are unique from those in the United States due to different immigration and indigenous histories, and the United States' close relationship between the State-sanctioned segregation of black Americans and environmental justice (Haluza-Delay 2007; Teelucksingh 2007). Canada has its own history and unique multi-cultural context, and therefore justice and equity issues should consider the intersections of race and/or environmental quality with immigration status, cultural backgrounds, indigeneity, and income levels (Teelucksingh 2007; Waldron 2018). Literature at the intersections of environmental justice, housing, and the immigrant or refugee experience in a Canadian context is limited. Existing knowledge documents the housing careers of immigrant populations in Canada (e.g., whether immigrant families own homes, rent and/or experience discrimination in the rental market) (Teixeira 2008, Murdie 2010; Firang 2019). Less attention has been given to examining the quality of immigrants' housing and associated impacts, particularly using methodological approaches that help to illuminate the voices and lived experiences of immigrant populations. Notable exceptions include Ghosh (2014) and Logan and Murdie (2016). Further, studies that examine the conditions of immigrant populations' living environments, and resulting impacts, across multiple scales, is limited in a Canadian context (Ghosh 2014; Logan and Murdie 2016).

This gap in the literature is perplexing, given the documented housing deprivation and health concerns within the immigrant community in Canada, despite Canada's commitment to both multiculturalism and desire to improve the economy through immigration (Hiebert 2010; Paradis, Wilson and Logan 2011; Government of Ontario 2018; FCJ Refugee Centre 2019). Immigrant communities in Canada are also increasingly experiencing gentrification pressures,

and major cities in Canada are increasingly segregated along racial and socioeconomic lines (United Way 2004; Hulchanski 2010; Walks 2010; Murdie, Logan and Maaranen 2013). Existing literature has documented that immigrant, low income, and racialized communities are often excluded from decision-making processes that shape the spaces in which they live, (Masuda, Poland and Baxter 2010; Grineski and Hernández 2010; Masuda et al. 2012; Pellow 2017) and as such, it is important to explore this within a Canadian context, as it pertains to housing, building and neighborhood environments.

Environmental justice research should seek to not only document deprivation and inequitable distributions of environmental risks, but also to call attention to the processes through which environmental inequalities are produced, in addition to activism and improvement initiatives within immigrant communities (Bauder 2002; Smith and Ley 2008; Masuda and Crabtree 2010; Amar and Teelucksingh 2015). Scholars refer to this as procedural environmental justice, which focuses on whether decision-making is fair, transparent and inclusive, and they have called for environmental research that focuses more explicitly on procedural justice (Schlosberg 2007, Walker 2009; Pearsall and Pierce 2010). There is little existing literature examining the procedural environmental justice issues experienced by immigrant and newcomer populations in a Canadian context.

1.3.2 OBJECTIVES

The objectives of this thesis are the following:

- Document the environmental living conditions experienced by immigrants and newcomers at multiple scales (i.e. high-rise unit, high-rise building; high-rise neighbourhood)
- 2. Determine the impact of these conditions on immigrants and newcomers and how they are coping with or taking action to improve high-rise environments.
- 3. Determine existing barriers that prevent immigrants and newcomers from engaging in advocacy or other means of improving their environmental living conditions in a high-rise neighbourhood.
- 4. Explore what approaches can be taken to increase immigrant and newcomer participation in housing and neighbourhood improvement efforts.

1.3.3 Theoretical framework: Environmental justice

The environmental justice literature, and subsequent environmental justice theory, emerged as a result of civil rights organizing in Warren County, North Carolina, USA in 1982 (Mohai, Pellow and Roberts 2009). The State of North Carolina planned to dispose of 120 million pounds of soil contaminated with polychlorinated biphenyls (PCBs) by dumping it in the county with the highest concentration of African Americans (Mohai, Pellow and Roberts 2009). This action prompted early studies on the disproportionate impacts of environmental burdens on low-income populations and people of color (Mohai, Pellow and Roberts 2009). Importantly, the United States General Accounting Office, in a 1983 study of the southern United States, determined that waste sites were often located in African American communities, and in 1987 a nation-wide study by the United Church of Christ Commission for Racial Justice determined that this pattern persisted nationwide (Mohai, Pellow and Roberts 2009).

Recently, scholars have categorized environmental justice literature into "first generation" and "second generation" studies and advocated for movement towards "critical environmental justice" (Walker 2009; Buckingham and Kulcur 2010; Pellow 2016). "First generation" studies largely focus on distributive environmental justice as it pertains to race and class, as well as changes to the distribution of environmental burdens over time, while "second generation" studies consider other intersections and aspects of identity (Walker 2009; Buckingham and Kulcur 2010; Pellow 2016). Pellow and Brulle introduced "critical environmental justice" in 2005 to "build on recent scholarship in environmental justice studies—'second-generation' writings—that questions assumptions and gaps in earlier work in the field by embracing interdisciplinary and methodologies and epistemologies including and beyond the social sciences" (Pellow 2016, 223). Critical environmental justice also calls for an examination of environmental justice issues at multiple scales (Pellow 2017). Discussion of justice issues, as well as their drivers and solutions at multiple scales (e.g., body, neighbourhood, country) is common among activists but lacking in environmental research (Pellow 2017). Similarly, Smith and Ley (2008) argue that understanding immigrant experiences requires attention to the range of geographical scales that affect their daily lives.

Other scholars have noted the importance of considering all three components of environmental justice (i.e., distributive, procedural, and recognitional), especially when

distributional justice perspectives have dominated the literature (Schlosberg 2007; Walker 2009). Distributional justice, where risks and benefits ultimately become situated across society and space, has likely received the most scholarly attention likely because it is easier to quantifiably measure (Schlosberg 2007; Pearsall and Pierce 2010). Procedural justice is concerned with whether decision-making is fair, transparent and inclusive, while recognitional considers whether social differences are accounted for (Schlosberg 2007).

Environmental justice theory is increasingly utilized internationally, including in Canada. Though environmental justice literature in a Canadian context is less comprehensive than the body of literature in the United States, it is increasingly critical and diverse (Haluza-Delay 2007; Teelucksingh 2007). Scholars have also noted that the environmental justice frame should be adjusted for studies within a Canadian context, as the United States has a specific history of state-sanctioned segregation, which is closely tied to much of the distributive environmental injustices (Haluza-Delay 2007; Teelucksingh 2007). While historical segregation is quite different in Canada and the United States, and major Canadian cities are often described as diverse and multicultural, they are nevertheless becoming increasingly segregated (Teelucksingh 2007; Hulchanski 2019). According to Teelucksingh (2007), "Canada's unique history of immigration and the ideology of multiculturalism have led to a relationship between race, ethnicity and immigrant status which is the key to understanding the hidden and latent nature of racial oppression in Canada" (646). Therefore, environmental justice issues in a Canadian context should not only be analyzed within the context of racial justice, but should also consider the intersections of race and/or environmental quality with immigration status, cultural backgrounds, indigeneity, and income levels (Teelucksingh 2007; Waldron 2018).

More recent literature has begun to apply the environmental justice concept to help better understand the experiences of Canada's immigrant populations. Notable examples include research on transit inequities experienced by immigrants in Toronto (Amar and Teelucksingh 2015), the extent to which environmental organizations in Toronto are inclusive of marginalized and racialized communities (Teelucksingh, Poland, Buse and Hasdell 2016), and newcomer women's exposure to environmental chemicals (Wiseman et al. 2019).

1.3.4 Housing and environmental justice

Although Bullard asserted in 1999 that within the context of environmental justice the environment encompasses "where we live, work, play, go to school, as well as the physical and natural world", studies that have focused on housing justice have largely been siloed from broader environmental justice literature (Rauh, Landrigan and Claudio 2008; Mohai, Pellow and Roberts 2009, 407; Haberle 2017). Environmental justice and housing issues are connected and overlapping, and notably, both sets of issues interact with racial segregation and marginalization, as well as "disparities in access to political power, municipal fragmentation, boundary-drawing around resources, disinvestment, and administrative silos" (Haberle 2017, 271). As environmental justice literature continues to expand to document environmental amenities, it is useful to consider the state of housing and what changes can be made to ensure equal access to the environmental benefit of healthy housing (Foy 2012). There is an opportunity to reduce disparities in health experienced by low income and marginalized communities by improving the housing environment (Rauh, Landrigan and Claudio 2008) and neighbourhood environment (Jones-Rounds, Evans and Braubach 2018). However, tenants living in poverty may have limited control over their environments or power over decisionmaking processes that shape exposure to environmental hazards, and thus, require support from policy and community groups to make changes or relocate, if necessary (Rauh, Landrigan and Claudio 2008).

Scholars have called for environmental justice literature to consider intersections with housing and indoor environments (Rauh, Landrigan and Claudio 2008; Grineski and Hernández 2010; Adamkiewicz 2011; Foy 2012). Foy (2012) notes that while environmental hazards such as toxic waste dumps are clearly a health hazard, subtler and often chronic conditions within housing are also harmful to health. Others have hypothesized that the limited environmental justice literature focused on housing matters may be due to the misconception that one's housing environment is a result of personal choice, rather than systemic injustices or power dynamics (Grineski and Hernández 2010). Yet recent public health crises and natural disasters in the United States have drawn attention to the linkages between housing, environment, power dynamics, and inequalities (e.g. lead poisoning in Flint, Michigan and remediation efforts following Hurricanes Katrina and Harvey) (Haberle 2017). In Canada, literature on housing

through an environmental justice lens that focuses on immigrant and newcomer populations, though limited, includes research focused on living conditions in Toronto (Ghosh 2014; Logan and Murdie 2016), secondary suite policies in Vancouver and Calgary and their impacts (Teixeira 2014; van der Poorten and Miller 2017), and the lack of inclusion of high-rise residents at a design charrette focused on high-rise tower renewal (Poppe and Young 2015).

More broadly, environmental justice literature focused on the health of vulnerable populations in Canada, is generally quantitative, and while the body of research has increased, there remains a lack of attention to the experiences of immigrant and refugee populations in addition to low-income, homeless, and rural demographics (Masuda et al. 2008; Phipps and Masuda 2018). Additionally, there remains less attention on upstream drivers of environmental injustices and on the social costs that can compound health impacts from harmful environments (Masuda et al. 2008; Phipps and Masuda 2018). Further, Deacon Baxter and Buzzelli (2015) found that mainstream Canadian news media often framed environmental justice issues as having positive economic trade-offs, which often undercut the lived experience of local communities coping with the environmental hazard. Marginalized communities that have dealt with environmental injustices, and their lived experiences, are largely missing from news coverage (Deacon Baxter and Buzzelli 2015). There is therefore a need to document and give voice to the lived experiences of immigrant and newcomer populations coping with and working to address harmful environmental conditions.

2. CHAPTER TWO: LIVING CONDITIONS AND THEIR ASSOCIATED IMPACTS AT MULTIPLE SCALES: EXAMINING HOUSING AND NEIGHBOURHOOD ENVIRONMENTS IN A HIGH-RISE NEIGHBOURHOOD

ABSTRACT

Environmental justice research has documented the disproportionate exposures to and impacts of harmful environments on certain groups, including low-income, racialized, and immigrant and newcomer populations. However, while existing literature has documented the consequences of unhealthy neighbourhood and housing conditions on health and wellbeing, few existing studies examine nested conditions and cumulative impacts across both of these scales. Further, few studies provide in-depth documentation of the voices and lived experiences of immigrants and newcomers residing in these environments, or account for and/or explain the increased vulnerabilities facing immigrant and newcomer populations within such environments. This paper presents a case study of immigrants and newcomers residing in the high-rise neighbourhood of Rexdale, Toronto. Drawing upon key informant interviews and focus groups with immigrant residents living in high-rise neighbourhoods, this paper provides in depth descriptions of the conditions and impacts at the unit, building and neighbourhood scales. Findings reveal that harmful housing conditions are widespread and severe, rent is unaffordable, and new investment in a historically disinvested area is raising concerns about affordability and displacement. Each of these has consequences for individual health and wellbeing and/or community dynamics, and environmental conditions and impacts at various levels interact.

2.1 Introduction and objectives

Housing conditions, and the natural and built environments that surround housing, are important social determinants of health and wellbeing. Crowded, poorly maintained, and unaffordable housing puts an individual's physical and mental health at risk (Dunn and Hayes 2000; Dunn et al. 2005; Mahamoud, Roche, Gardner and Shapcott 2012). Similarly, the environment surrounding housing can influence chronic disease risk, physical activity, social interactions, sense of safety, access to amenities, economic opportunities, and mental wellness (Jackson 2003; Frank, Engelke and Schmid 2003; Bryant, Raphael and Travers 2007; Dannenberg, Frumkin and Jackson 2012). Recent literature has also demonstrated that substandard housing and poor neighbourhood quality can interactively affect mental health

and well-being, with neighbourhood quality amplifying or diminishing the impact of housing quality (Jones-Rounds, Evans & Braubach 2018).

Within Canada, a country committed to both diversity and equality, equitable access to suitable and healthy environments remains an environmental justice issue, with low-income, indigenous, and minority populations encountering more health hazards and fewer health-promoting conditions (Hulchanski 2010; Walks 2010; Amar and Teelucksingh 2015). At the same time, immigrants have lower self-reported health and quality of life (Williams et al. 2015; Ng Wilkins, Gendron and Berthelot 2005), higher prevalence of chronic disease and mortality (Newbold 2006) and poorer access to health care services (Curtis and MacMinn 2008) than the Canadian-born population, yet little attention has been given to the role of environmental conditions and quality of built form or infrastructure as contributors.

In Toronto, one of Canada's largest and most diverse cities, inequitable and unhealthy conditions have been observed at both housing and neighbourhood scales. Toronto has become an increasingly unequal and segregated city, effectively separated into "three Cities" divided by race and income (Hulchanski 2010). As neighbourhoods with mixed income levels and diversity become more scarce, low-income, minority, and immigrant populations are pushed to neighbourhoods in the inner suburbs, where there is widespread disinvestment, and generally low walkability, and poor access to transit, healthy food and community services (Hulchanski 2010; United Way 2011; City of Toronto 2014). At the scale of housing, black African immigrants can face discrimination in the rental market (Teixeira 2008). Racialized immigrants and single mother families are disproportionately occupants of aging apartment buildings, and newcomer and visible minority populations are most likely to be living in overcrowded conditions (Paradis, Wilson and Logan 2014).

There is growing evidence that certain populations disproportionately experience both substandard housing *and* unhealthy neighbourhood conditions (Rosenbaum 2008; Chambers, Pichardo and Rosenbaum 2016; Lejeune, Xhignesse, Kryvobokov and Teller, 2016). This has been observed within ethnic enclaves in the inner suburbs of Toronto, where ageing housing stock and the surrounding neighbourhood is potentially harmful and has experienced disinvestment (Hulchanski 2010; United Way 2011; Ghosh 2014). While there is debate

surrounding how these ageing high-rise buildings should be revitalized, there is little research on the lived experience of those residing within high-rises (Ghosh 2014). In general, few studies that have observed associations between poor living conditions and health or ethnicity have given in-depth consideration to the voices and lived experience of immigrant and newcomer populations', particularly within a Canadian context (notable exceptions: Ghosh 2014; Logan and Murdie 2016). Consequently, we know little about the compounding impacts that housing and neighbourhood environments can have on newcomer populations' health and wellbeing in their day to day lives, particularly within a Canadian context.

Housing literature has generally focused on how single characteristics of housing impact health and wellbeing, as opposed to the cumulative impacts of various components of housing quality or what Baker et al. (2017) refer to as the "housing bundle". This is reflective of broader propensities to frame environmental health issues through a reductionist approach that focuses on single issues (such as preventing exposure to a particular toxin) instead of taking a holistic and intersectional approach (Masuda, Poland and Baxter 2010; Phipps and Masuda 2018). There have been notable, albeit limited, exceptions that have explored housing and neighbourhood environments together (Grineski 2008; Logan and Murdie 2016; Chambers, Pichardo and Rosenbaum 2016; Lejeune, Xhignesse, Kryvobokov and Teller 2016; Park and Evans 2016; Baker et al. 2017; Jones-Rounds, Evans and Braubach 2018). Within this emerging literature, only a few studies focus on immigrant populations specifically (Chambers, Pichardo and Rosenbaum 2016; Logan and Murdie 2016), which is perplexing given their disproportionate exposure to substandard living environments.

In an effort to address this gap in the literature, and to complement insights gained from studies that have adopted a quantitative approach (Chambers, Pichardo and Rosenbaum 2016), this case study documents housing and neighbourhood environmental conditions and their impacts, as experienced by immigrants and newcomers in a high-rise neighbourhood. High-rise towers were chosen as a focus due to their prevalence in the City of Toronto, particularly within the inner suburbs (Ghosh 2014) and among newcomer populations (Ghosh 2014; Hiebert 2010). Further, previous research has demonstrated that residing in high-rise housing, within a crowded urban environment, can be particularly harmful to mental health

when compared to living in other types of housing within a similar neighbourhood environment (McCarthy, Harrison and Keithley 1985).

This paper begins with a review of literature focused on the living environments experienced by immigrant and newcomer populations and recent broader research attempting to document the interactive effects of both housing and neighbourhood environmental conditions. Following, there is a description of research methods and findings. The paper concludes with a discussion of the implications of our findings and recommendations for future research.

2.2 LITERATURE REVIEW

2.2.1 LIVING ENVIRONMENTS OF IMMIGRANT POPULATIONS

An emerging body of literature has begun to explore the intersection of the settlement experience and housing and/or neighbourhood conditions (Litt et al. 2009; Standish et al. 2010; Ghosh 2014; Logan and Murdie 2016; Oudin et al. 2016). Studies within this field have typically utilized a quantitative approach to identify associations between variables (Litt et al. 2009; Standish et al. 2010; Oudin et al. 2016) or have focused on the barriers to obtaining housing and/or evolution of immigrants and newcomers' housing careers (e.g., Teixeira 2008, Murdie 2010; Firang 2019), rather than the lived experiences of newcomers and immigrants that find themselves residing in poor environmental conditions, especially within a Canadian context. Within the context of Toronto, Ontario, studies by Logan and Murdie (2016) and Ghosh (2014) are exceptions with each focusing on a single ethno-cultural group. Other Canadian case studies, including one focused on Richmond and Surrey, two suburbs of Vancouver, explore the lived experiences of low income, recent immigrants from varied socio-demographic backgrounds (Teixeira 2014).

Ghosh (2014) documented the daily lives of Bangladeshi immigrants living in high-rises in the inner suburbs of Toronto, with a predominant focus on the housing unit and building scale. Ghosh (2014) found that high-rises had suboptimal social conditions including lack of spaces for residents to gather and socialize in addition to invasion of tenants' privacy by landlords. The living environment was also found to be unhealthy, with landlords exploiting Bangladeshi tenants' lack of knowledge of housing rights (Ghosh 2014). Ghosh (2014) found

that living within high-rises also had some positive aspects, as the co-location of multiple residents of the same ethnicity in one building allowed for a sense of community. Less attention was given to how these lived experiences of building level conditions are situated within broader neighbourhood environmental conditions, yet Ghosh does note that high-rise buildings themselves constitute a "vertical neighbourhood".

In their research exploring satisfaction with living conditions at housing, building and neighbourhood scales, Logan and Murdie (2016) utilized a mixed method approach including a questionnaire survey of Tibetans living in high-rise housing, as well as photovoice methods to draw out Tibetan women's ideas of "home". They found that the vast majority of Tibetans in living in high-rise units in Parkdale, Toronto were "satisfied" with the conditions of their buildings and the size of their housing units despite the fact that overcrowding within units was found to be objectively severe, with many families of five or six living in one bedroom or bachelor apartments. Further, nearly 80% of respondents cited affordability as a major concern. The majority of their research participants also reported satisfaction with surrounding green space in addition to having a sense of community and belonging. However, only a minority of respondents indicated that their neighbourhood was ideal for raising children. The researchers noted that overall, their findings seemed to conflict with Census data and reports from a local tenants' association that demonstrated housing in Parkdale was substandard. They hypothesized this contradiction could be due to fear of backlash from landlords or due to previous experiences of even worse housing conditions (Logan and Murdie 2016).

Research from elsewhere in Canada includes a case study of the lived experiences of low-income, recent immigrants renting in Richmond and Surrey, two outer suburbs of Vancouver (Teixeira 2014). Teixeira (2014), through focus groups, key informant interviews, and surveys, determined that new immigrants experienced unaffordable rents, overcrowding, and unhealthy living conditions. Many participants were paying more than thirty percent of their household income on shelter costs, increasing the risk of homelessness, and the most common dwelling types were apartment building units and secondary suites (Teixeira 2014). Teixeira (2014) noted that more research is needed to determine the concentration of newcomers in these, and similar, areas, as well as how ethno-cultural networks influence housing careers.

Studies from outside of Canada have demonstrated that indoor environments that are potentially harmful to respiratory health, are prevalent in households of low-income and recent immigrants (Litt et al. 2009; Oudin et al. 2016). In a study of immigrant families' in Sweden, Oudin et al. (2016) observed extremely poor housing conditions and associated impacts on children's respiratory health. In one of the neighbourhoods under study, 67% of the housing units had been treated for cockroaches, and 27% had full-blown infestations (Oudin et al. 2016). Mould was observed in 40% of units (Oudin et al. 2016). Associations between asthma and dampness, mould and headaches, and cockroaches and poor general health were found to be statistically significant (Oudin et al. 2016). Litt et al. (2009) found similar indoor environments in households of recent Mexican immigrants living in Denver, Colorado, USA. Sixty seven percent of homes had at least one environmental hazard, such as dampness, mould, pests or lack of ventilation, while 27% of homes had more than one environmental hazard (Litt et al. 2009). Other suboptimal housing conditions, afflicting over 25% of immigrants in the study, included overcrowding (Litt et al. 2009). Another study of undocumented Mexican immigrants living in New York City found 82.5% of participants lived in housing with more than one person per room and 37.6% lived in housing with more than two people per room (Standish et al. 2010). Overcrowding was statistically associated with insufficient food and experiences of language discrimination (Standish et al. 2010).

Findings from these studies have been compelling in identifying associations between poor environmental living conditions, immigration status, and potential health outcomes. Nevertheless, there remains a need for more qualitative explorations using techniques that are effective in establishing trust and rapport with diverse minority groups with historically limited power. Qualitative methods can increase opportunities for such study participants to describe in their own words their lived experience of conditions and impacts in detail without being constrained by pre-determined survey questions that do not allow for interpretation, elaboration, or unique insights that researchers may not have thought of (Kidd and Parshall 2000; Umaña-Taylor and Bámaca 2004). Further, amongst studies that have focused on impacts on certain immigrant populations, few (e.g. Logan and Murdie 2016) consider the lived experiences of housing conditions and their impacts in conjunction with the conditions and

impacts experienced in the surrounding neighbourhood environment in which housing units are situated.

2.2.2 Broader knowledge on household and neighbourhood environments and associated impacts

When considering the broader literature, other studies (that do not exclusively focus on immigrant populations) have begun to explore the interactive effects of both household and neighbourhood environments on health and wellbeing, offering important insights (Lejeune, Xhignesse, Kryvobokov and Teller 2016; Baker et al. 2017; Jones-Rounds, Evans and Braubach 2018). For example, Jones-Rounds et al. (2018) developed a multilevel random coefficient model to statistically analyse interactive effects and found that substandard housing quality and poor neighbourhood quality each contribute to lower psychological well-being. Yet, better neighbourhood quality can buffer against the negative effects of poor housing. Other studies that have considered both housing and neighbourhood scales are limited to examining one select outcome such as sleep quality (Chambers, Pichardo and Rosenbaum 2016) or asthma (Grineski 2008; Rosenbaum 2008). Most of this existing research has been conducted within the United States or Europe.

In a study of indoor and outdoor environmental quality in Wallonia, Belgium it was found that while low income individuals were more likely than their wealthy counterparts to both inhabit lower quality housing and experience neighbourhoods with environmental burdens, the differences in quality of housing were more pronounced than those in the outside environment (Lejeune, Xhignesse, Kryvobokov and Teller, 2016). Baker et al. 2017 note that different components of one's living environment including state of repair, affordability, issues in the surrounding neighbourhood, and the ability to access services often have their impacts on health measured individually, rather than as a "housing bundle". In response, their study combined 11 characteristics into an "Index of Housing Insults" and determined that housing insults are associated with a variety of health outcomes including mental health, general health, and clinical depression (Baker et al. 2017). Further, the index was found to be more predictive of health outcomes than single characteristics of housing (Baker et al. 2017).

Ability to control one's indoor and outdoor environment also appears to be a factor in health outcomes. Grineski (2008) found that families in Phoenix, Arizona, USA with rentalassistance vouchers, had greater control over their indoor and outdoor environments and less exposure to asthma triggers compared to those living in public housing developments. Rental vouchers allowed families more choice through enabling entry into the private market, with part of their rent paid by the state or federal government, while public housing developments were often in close proximity to environmental hazards and/or asthma triggers (Grineski 2008). Rosenbaum (2008) in a study of asthma prevalence among different racial and ethnic groups, found that deteriorated housing and low levels of social cohesion in the surrounding neighbourhood increased the odds of having asthma. However, even when controlling for these factors, the levels of asthma experienced by Puerto Rican and black households were disproportionately high compared to white households. Chambers, Pichardo, and Rosenbaum (2016) examined the cumulative effects of housing and neighbourhood environments on Latinos in the West and South Bronx, New York, USA. Their results indicate that household crowding, building problems, and neighbourhood environments were independently associated with sleep outcomes and that these environments also had a cumulative effect on certain aspects of sleep (Chambers, Pichardo and Rosenbaum 2016).

While this emerging body of research has important findings, it is important to explore these themes within Canada, a country espousing diversity and multiculturalism. Further, a qualitative approach would allow for a "thick description" and holistic understanding of immigrants' experiences stemming from their household and neighbourhood environments, enabling in-depth understanding of complex dynamics between living environments and health and wellbeing that quantitative surveys may be unable to fully represent (Kidd and Parshall 2000; Umaña-Taylor and Bámaca 2004; Bryman, Teevan and Bell 2009).

2.3 METHODS

2.3.1 CASE STUDY CONTEXT

Our study focuses on Rexdale, an ethno-culturally diverse inner suburb of Toronto located north-west of the downtown. This case study description here is similarly detailed in another paper that emerged from this study (Brown, Edge, Ghosh and Murnaghan under

review). Our understanding of Rexdale's boundaries evolved as we spoke to community members with different perceptions of their neighbourhoods than City-defined boundaries, a common phenomenon (Coulton, Korbin, Chan, and Su 2001). According to the City of Toronto website, neighbourhood boundaries "were made to make [census] data in the profiles useful to as many users as possible, and are not intended to be statements or judgments about where a neighbourhood starts or ends" (2019). We recruited adult immigrant residents that selfidentified as living in a high-rise building in the Rexdale neighbourhood to participate in focus groups. Key informant interviews were conducted with representatives from service agencies self-identified as located in Rexdale or working with members of the Rexdale community. As a result of this self-identification, our understanding of Rexdale is comprised of six smaller government-defined neighbourhoods: Mount Olive-Silverstone-Jamestown, Thistletown-Beaumond Heights, Rexdale-Kipling, Elms-Old Rexdale, Humber Summit, and Humbermede. According to the City of Toronto website these smaller neighbourhoods, with the exception of Rexdale-Kipling, have been identified by the City as Neighbourhood Improvement Areas, slated for priority investment due to low levels of economic opportunity and participation in decisionmaking, in addition to community health, physical environment, and/or infrastructural concerns (2019).

Development in the Rexdale area existed as early as 1830, with the construction of mills, churches, schools, and taverns (Ghosh et al. 2018). As the population grew, the majority of agricultural land in the area was cultivated by the early 1900s (Ghosh et al. 2018). By the 1950s the area had evolved into a suburban subdivision with a mix of residential and industrial land uses, including some high and low-rise apartment buildings, as well as public housing (Hulchanski 2010; Ghosh 2014; Ghosh et al. 2018). Throughout the 60s and 70s, Rexdale experienced a significant increase of high-rise housing developments built to serve low-income families (Hulchanski 2010; Ghosh 2014). Since then, these aging high-rise structures have not received much public or private re-investment. Over time, lower-income, racialized immigrant populations became concentrated within high-rise buildings in disrepair and neighbourhoods with poor walkability, low access to transit, and limited economic opportunities (Hulchanski 2010; United Way 2011). Many immigrant families live within these buildings for prolonged

periods, due to their relative affordability, larger-sized family-friendly units, proximity to ethnic retail or institutions, and scarcity of alternative housing supply (Hiebert 2010; Ghosh 2014).

Many of the social service agencies and community organizations that exist are concentrated at the Rexdale Community Hub, which opened in 2012 in an effort to integrate health, social, legal, employment, and cultural service provision into a "one-stop shop". Recent development across the region, including a casino, condo housing, and light rail transit, has the potential to bring additional services and jobs to this area, yet has introduced concerns related to gentrification and displacement.

2.3.2 Data collection and analysis

Data was collected through semi-structured key informant interviews and focus groups. Key informants included 23 representatives of social service and advocacy organizations working with Rexdale residents on matters relating to housing conditions, landlord-tenant disputes, community initiatives or revitalization, immigration and settlement, as well as services for individuals experiencing homelessness. Key informant interview participants were initially recruited through purposive sampling involving online searches, followed by snowball sampling (Crabtree and Miller 1999). Two focus groups were conducted with a total of 20 participants from a range of countries of origin including: Somalia, India, Jamaica, Nigeria, Iraq, Pakistan, and Syria. The members of each focus group identified as immigrants and/or newcomers that resided in high-rise buildings in the Rexdale area. Most participants rented in the private rental market or resided in public housing, while a few participants owned condos in high-rises. Both focus groups were recruited through neighbourhood partners. The first focus group was recruited through Rexdale Women's Centre, a social service and settlement agency, and the second focus group was recruited through a local community development officer who works closely with a residents' council.

Key informants were asked about housing conditions, their immigrant and newcomer clients' experiences while living in high-rises, and the impacts of these conditions on immigrants and newcomers. They were also asked about the quality of the neighbourhood environment and its impacts. Similarly, focus group participants were asked about the conditions of their

units, buildings and neighbourhoods, as well as the impact of such conditions upon their health, well-being, and daily lives.

Interviews and focus groups were recorded and transcribed. Following, transcripts were thematically analysed using *NVivo* software. Two data sources, key informant interviews and focus groups, allowed for data triangulation throughout the thematic analysis (Yin 2009). Member-checking was completed on both an individual basis for interviews and through a public presentation and open dialogue around preliminary findings involving local residents and stakeholders. Throughout the findings section, "FG1" and "FG2" delineate contributions from participants who took part in the first or second focus group, followed by a unique participant number. "KI" signifies contributions from key informants.

2.4 Environmental conditions at the unit and building scale

When service providers and focus group participants were asked about their general impressions of high-rise tower units in the Rexdale area, responses indicated that housing conditions are substandard, and that the units are generally in disrepair (see Figure 1 for examples of conditions at the housing, building, and neighbourhood scale). At the same time, housing was described as unaffordable, with rents increasing beyond what was sustainable for many of Rexdale's residents. Units are also often overcrowded, with many generations, multiple families, or multiple working individuals sharing space intended for a much smaller number of inhabitants.

Due to the age of many of the high-rise buildings in Rexdale, many buildings' features are inefficient, such as boilers, windows and appliances, and contribute to energy waste or greenhouse gases (KI-7, KI-14). High-rise housing in Rexdale was described by some as a "disaster" (FG2-6, KI-3) or "horrendous" (KI-15). An employee at a legal clinic reported that a client told them, "before the war, my house was better than this one", and several focus group participants expressed that the conditions they are living in should not exist or be tolerated in Canada. The same legal clinic representative reported that approximately 60% of the individuals that contact them do so because of a housing issue. Key informants across multiple service agencies reported that their staff do not have the capacity to deal with all of the housing issues that are brought to them.

Bed bugs, cockroaches and other pest infestations were issues that came up frequently in focus groups and interviews. Bed bugs were mentioned by seven key informants (KI-2, KI-4, KI-6, KI-7, KI-8, KI-9, KI-15) and one individual in the first focus group (FG1-11). A staff member at the legal clinic described a severe case they had seen recently, "tenants living in Rexdale whose bed bug situation is so bad that there are live bugs crawling out of their clothing when they're sitting talking with our staff". Their coworker also described a home visit to an elderly couple where blood and squashed bed bugs were observed all over the walls. The landlord in this case was unresponsive to the bed bug issue. Both staff members noted that in severe bed bug cases, it is likely that bed bugs spread to neighbouring apartments, and because treatment of bed bugs is costly, landlords have at times attempted to eradicate them with ineffective treatments or did not retreat units when necessary.

Cockroaches were mentioned by five service providers (KI-4, KI-8, KI-9, KI-13, KI-15) and several focus group participants (FG1-1, FG1-3, FG1-9, FG1-10, FG1-11). An employee at an immigration and settlement agency detailed the severity of one infestation, "yesterday somebody was telling me that she baked a cake for her daughter and when she cut the cake there were cockroaches in there. So, you can imagine the number of cockroaches." It was suggested by one focus group participant that part of the cockroach issue may be due to plumbing issues resulting in standing water (FG1-3). Similarly to bed bug treatment, cockroach treatment was described by a focus group participant as being ineffective:

The management, they do treatments every three or six months...They ask us to clean all kitchen, all bedrooms. So, we put in time and effort and we clear all that up...I see no benefit to the limited treatment that they do. Because I see that there are now more cockroaches (FG1-9).

In addition to cockroaches and bed bugs, rodent infestations were mentioned (FG1-1, KI-6, KI-7, KI-13). Multiple infestations can occur at once, often alongside other issues:

We have mould, mice, cockroaches, and the elevator is not that good. One day this one is working and the other is not working, and then they fix this one then the other one's not working. And the people are suffering (FG1-1).

One key informant explained what a typical case looks like:

In general, a person would come to us telling us that the fridge is not working...the fridge just spoils everything. On top of that maybe the oven isn't working, or the washroom isn't working, or the tiles are falling. So, it could be any of those, or all together. Bed bugs, roaches, the ceiling in the washroom. Any of these buildings because they're old, there is no exhaust system, the washrooms have a lot of condensation, so there's a lot of mould. And sometimes there have been floods from the apartment upstairs, so the ceiling is kind of falling, some of them have fallen down. (KI-8)

Elevators being out of service, or getting stuck with tenants inside them, was a problem reported by participants in both focus groups and many key informants (FG1-1, FG1-3, FG1-7, FG1-9, FG1-12, FG2-1, FG2-5, KI-4, KI-5, KI-6, KI-7, KI-8, KI-13) One focus group participant reported that one elevator in their building was down for five months, while another reported that one of their building's three elevators is always out of service.

Mould and plumbing issues are common and sometimes concurrent within high-rise units. Mould was mentioned by focus group participants and key informants (FG1-1, FG2-1, FG2-6, KI-2, KI-7, KI-9, KI-15). Mould growth can occur in many areas of high-rise units, as one focus group participant described, "I told them too many times that now there is mould [in the bathroom]. Also around the windows in the bedrooms. My two sons' mattresses are also mouldy" (FG1-1). Focus group participants stated that landlords took long periods of time to address mould issues, and that City Property Standards employees only responded to mould issues that were of a certain severity (FG2-1, FG2-6). There were also concerns about how well mould was removed, and the chemicals that were used to clean the mould, especially when multiple treatments were required (FG1-1). One individual reported that building management had replaced unit windows, which helped solve the building's mould problems (FG2-2).

Plumbing issues that were mentioned were varied and included no running water, nonfunctioning toilets, no hot water, standing water, and leaks. Plumbing issues reportedly led to other problems such as damage to walls or ceilings, especially when issues are not fixed properly in order to reduce costs,

A lot of the work they do is sort of reactive, someone's wall will crumble because there's been a leak that's been going on for years that hasn't been fixed, but instead what they'll do is every few years they'll come and put up a new wall instead of actually fixing the leak, because it just saves so much more cost, right? (KI-13).

Another key informant explained that this sort of "patch up work" is frequently done for other issues,

many of them also do cosmetic kind of patch up work and it looks good with your eyesight but then with time, that same problem comes back. They have redone the kitchens in most of the apartments, but with very poor quality, so they fall apart right away (KI-9).

The majority of key informants and service providers shared the view that property owners were concerned more with profit than the unit conditions experienced by their tenants (KI-2, KI-6, KI-7, KI-8, KI-9, KI-10, FG2-1, FG2-6). For some, this was reflected in the juxtaposition of higher quality conditions within more visible lobby or common areas and more unhealthy conditions of individual housing units (FG2-1, FG2-6). As one focus group participant explained, "what is usually done is they'll fix the common areas like the lobby so that way when you come in the lobby you'll think that this is the general look of the building and when you come up on the different floors, it's not so."

A key informant explained that both regular maintenance and larger building issues, may be ignored in an effort to maximize profits:

Buildings that are more affordable, unfortunately, large corporations that look at profit and buy these rental towers are often looking at a specific margin. So, they're going in and saying, "we want to make x percentage". And if redoing the boiler room is going to cut into that percentage, they'll push off on doing it. So sometimes you get just major issues, usually things around pest control, health and environmental issues like mould and asbestos, as well as certain kinds of foundational issues, like electrical systems, and general maintenance and cleanliness just not being done." (KI-7)

One key informant, familiar with housing conditions in the Somali community, suggested that this lack of maintenance was not only an effort to save costs by building maintenance but to drive out tenants in order to raise rents for their replacements:

So, the other tactic that's happening right now is shutting down of the water, heat and electricity. So, what they do is claim they're maintaining the pipes and so on, but that's another way, another systematic way of creating very uncomfortable situations so that people say, "You know what? I can't live in this condition, I have to move." (KI-15)

In addition to maintenance issues and unhealthy conditions, focus group participants and key informants also reported that tenants are often living in overcrowded units. Often, this

is a result of the high (and increasing) cost of living in Rexdale or barriers to accessing the rental market as an immigrant (with or without status).

There's flat out illegal stuff happening where landlords because they have a big pool of applicants are being very selective of who they pick based on things that are not permitted by law... you have landlords that are flat out saying, if it is a refugee or whoever, regardless of the status, like if it is a refugee I'm not going to give them an apartment. And that becomes bigger vulnerability for them because where are they supposed to go? They might end up with another person who will take advantage of their situation and you know, constantly change their rent or maybe won't provide the upkeep that they're supposed to as landlords. (KI-2)

Because they don't have status they can't prove income, that's so that's another barrier. If you can't prove income no landlord wants to rent to you. So, they have try to move in with someone. (KI-1)

For the privately-owned housing, it's unaffordable. A lot of times you're seeing a lot of immigrants, newcomers, their only option is to be able to live in a space where in a two-bedroom apartment there's like six people living in there — large families that have no other areas to live in and have to resort to a two bedroom. And it's like, I've seen that with a lot of people. Even some of the people that work in the construction industry... there's six males that live in a small apartment together and they have to have rotations of sleeping throughout the day based off their work shift (KI-13).

Many focus group participants noted that the price of their rent, which sometimes is accompanied by an additional maintenance fee and utility bill, was too high, especially given the conditions of their units (FG1-1, FG1-10, FG2-1, FG2-2, FG2-3, FG2-4). Both focus group participants and key informants noted that rents are increasing in Rexdale, which has historically been an area newcomers move into due to affordable rents (FG2-1, FG2-2, FG2-3, FG2-4, FG2-6, KI-5, KI-3, KI-8, KI-10, KI-12). As one key informant noted, "We were sort of like the last holdout of affordable, somewhat affordable housing, in the City of Toronto, not anymore...we're seeing that change, we're seeing the gentrification happening." Additionally, participants in both focus groups and key informants noted that landlords often take advantage of immigrants and newcomers that are unaware of rent regulation and increase rents more than the legal amount each year (FG1-12, FG2-1, FG2-3, FG2-5, KI-5, KI-15).

Another building-wide issue that was documented by focus group participants and key informants was the lack of community space within buildings or challenges in being able to

access it (FG2-2; KI-6; KI-8). One focus group participant noted that their building's pre-existing party room or community space was converted into a unit (FG2-2). There was however, one focus group participant whose building owner was working with initiatives at the City of Toronto to increase community space within the building (FG2-1).

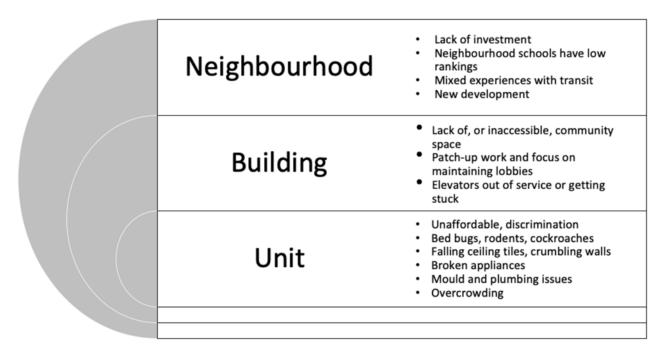


Figure 1. Substandard environmental conditions, examples at multiple scales

2.5 IMPACTS RESULTING FROM ENVIRONMENTAL CONDITIONS AT THE UNIT AND BUILDING SCALE Interviews and focus group responses indicated that the impacts of unsuitable, unhealthy and overcrowded conditions at the housing scale are diverse, impacting individuals' emotional wellbeing, physical health, social relationships and ability to make use of space.
Additionally, substandard housing has impacts on the larger community scale (see Figure 2 for examples of impacts resulting from conditions at the unit, building, and neighbourhood scale).

Physical health issues that were reported by focus group participants and key informants included respiratory issues from mould (FG2-1, KI-7), asbestos (KI-7), and smoke or incense due to neighbors' activities (FG2-1). Three focus group participants reported breathing issues indoors (FG2-1) and feeling "suffocated" because there is "not much air". Housing conditions such as overcrowding, and specifically not having your own room or bed, can

negatively impact sleep (FG1-4, FG1-8, KI-4, KI-8). Key informants also reported lack of sleep can result from loud neighbors, especially when seniors live in close proximity to younger individuals (KI-4; KI-5).

Elevators being out of service or poorly maintained hallways or grounds were reported to "take a toll" (KI-6) on physical health, as well as having an impact on emotional wellbeing and ability to carry out daily activities. One focus group participant with mobility issues noted that they are unable to use the stairs, and others mentioned that those in wheelchairs or with mobility issues are especially impacted by elevators not functioning (FG1-3, FG1-5, FG1-12, KI-5, KI-6). Key informants noted that seniors or women with small children may have to go without trips to the grocery store, or the community center as a result of non-functioning elevators, which has the potential to cause social isolation:

Their daily activities are challenged, compromised. You know, am I going to go to the community center down the street if I have to climb 10 flights of stairs? And especially if you have some sort of physical impairment (KI-6).

Elevators being out of service, or getting stuck in one, can also cause stress. One focus group participant described coming home with groceries and her child in a stroller to realize the elevator was not working, while another described stress resulting from dismissive responses from management after being stuck in an elevator (FG1-9, FG2-2). Another focus group participant that got stuck in their building's elevator experienced a panic attack (FG1-7). It was also reported that some property managers may deter residents from calling 911 when the elevators get stuck by telling tenants they'll have to pay if any costs or damages are incurred, causing additional stress (FG1-7).

Emotional and mental wellbeing can be impacted by other building and unit issues, as well as by the lack of responsiveness of building management or landlords. One focus group participant reported depression and anxiety due to their living conditions and financial issues, while another participant explained, "You are constantly anxious and upset, especially when I have to go to the office to drop off my rent. Especially at that time, I am so upset. I wish I could just take my rent and do whatever fixtures need to be done" (FG2-1). Sadness and shame was reported due to housing conditions. Children without their own bedroom, due to overcrowding, were reported to be sad upon discovering schoolmates had their own rooms, and a key

informant reported that a client was ashamed of their housing conditions (FG1-3, KI-4). For this reason, the individual didn't have visitors, or tell anyone where she lived (KI-4).

A legal clinic staff member explained that one tenant was "raging" and "furious" because they could not get their landlord to repair their unit's sliding doors, which was causing the unit to be very cold in the winter, "he cannot get the landlord to pay attention to this basic housing need...and that causes the man to go off like a rocket because he's a resettled immigrant, social dislocation, post-traumatic stress...language barriers". Tenants' frustration, hopelessness and anger due to chronic maintenance issues, and towards unresponsive landlords, was mentioned by participants in both several focus groups and key informants. Further, the stress of substandard conditions can become exacerbated due to cumulative impacts of poverty, and difficult immigration and settlement experiences:

There's a huge mental health component that's happening: the depression, the stigma involved in that. These are people that had pride, that are educated from back home, and now they're considered lower than dirt, and that has a huge effect on their mental health. And then on top of that - if a mother and father go through that how are they going to be able to support their children? (KI-I)

Substandard housing conditions and maintenance issues also have the potential to have monetary costs. This was noted to be due to bed bug infestations, where the furniture had to be thrown out (KI-4, KI-9), or due to broken appliances causing food to spoil or requiring families to go out for meals (KI-8).

Unhealthy or hazardous housing can result in units being abandoned and left empty, "that neglect has sort of led to... certain buildings or communities that are in disrepair, some units that have been left abandoned now" (KI-13). As pointed out by a key informant, units left empty can be seen as unethical, when the City of Toronto is in a housing crisis and more affordable housing units are desperately needed (KI-12).

Lack of building amenities, such as community space, can have impacts on socializing for residents (KI-6, KI-8). Further, one key informant explained how youth and elders or groups that are simply looking for a place to informally socialize cannot typically make use of building's facilities in this way, and are often reprimanded when they gather in other spaces.

We had a situation where we had the property management group at the mall say seniors are causing trouble at the food court. "They hang out here too much, they take

up our seats, they're not buying any food, and they're rowdy..." Well they don't have a place to go right? They can't go to their apartment building because the recreation room...you have to book it and it's not setup for that. You can't sit outside in the lobby in your apartment building because they don't like that. They don't like people to congregate too much. You know we had the security people break up youth groups at [building name] because they were hanging out in the lobby (KI-6).

Substandard housing conditions can exacerbate neighbourhood-level transience (FG2-1, KI-4, KI-5, KI-16). While certain communities and families remain in high-rise housing and are unable to afford moving, key informants explained that families that can afford to move to other areas often do (KI-4, KI-5, KI-15, KI-16). One key informant explained "people move out, the community doesn't get built" and community knowledge and leadership can be lost as a result (KI-15). Another echoed this sentiment and suggested this dynamic of "constant turnover" makes it hard for residents to unite against property owners or another common cause (KI-2).

Key informants with experience assisting immigrants living in poverty or other vulnerable situations explained another symptom of unaffordable housing costs was that refugees and new immigrants may be forced to stay in precarious situations. For example, some are staying within the hotel or motel system for extended periods of time, (one service provider reported more than a year). They also explained that extended stays in shelters are becoming more common for women and children. Transient homelessness was noted as an increasing problem in the area including "shelter hopping" and staying at friends' houses (KI-1, KI-2). As a result, homelessness is often hidden, with policymakers often unaware of the extent of the issue, making it difficult to provide resources to those who need it (KI-6, KI-10).

Without the ability to afford housing on their own, women, including those with children, might be forced to stay with an abusive partner to avoid homelessness (KI-1, K1-2, KI-3, KI-6, KI-15). This is particularly common for undocumented immigrants unable to secure employment or support themselves, or women who are facing abuse from their immigration sponsor (KI-1, KI-2, KI-3). In an effort to make ends meet, families may have the father live separately from the mother, or not report all income, in order to receive more social assistance (KI-9). Newcomer mothers have also sent their children back to their country of origin to live with their grandparents when they cannot find suitable housing (KI-1). High housing costs often

mean that families are sacrificing other needs, such as clothing and food, and cannot afford transportation (KI-10).

As mentioned earlier, social service agency employees noted many immigrants, both families and single working adults, are living in overcrowded conditions. In addition to sleep disturbances, key informants reported that overcrowded conditions led to household tensions, lack of privacy, and unhygienic and unsafe conditions (KI-1, KI-2, KI-4, KI-13). Overcrowded conditions can also lead to social isolation, due to lack of space to have friends over, or time spent caring for family including children or elderly relatives (KI-4).

An employee at an immigration and settlement agency described how housing conditions not only impact individuals living within the units, but also have broader consequences at the community scale:

You have, for example, buildings that are derelict and it kind of has that ripple effect. The same thing happens in the community, right? You don't have as many stores... banks have fled by the dozens, literally, from here. I remember having a bank at every corner now they're very far and few between...And so seniors, and not only seniors, but women, have to go further for these basic services, right? And so there aren't that many places that exist anymore, so transportation doesn't exist, there are fewer bus routes. So I think everything has a ripple effect. It doesn't just stop with the fact that you're living in derelict housing. It's everything around you.

This statement illustrates the importance of examining and understanding how lived experiences of housing conditions and impacts are nested within neighbourhood conditions that generate distinct and cumulative impacts.

2.6 Environmental conditions and resulting impacts at the Neighbourhood scale In addition to discussing conditions within high-rise buildings and units, key informants and focus group participants discussed the conditions in the broader neighbourhood. As a result of lack of investment and a concentration of poverty, there is a stigma that exists concerning the Rexdale neighbourhood and its residents. One key informant explained,

It's got the stigma of being a Neighbourhood Improvement Area, where there's lots of issues, lots of social problems, things like that...a lot of people do not want to come up to this area because of that (KI-10).

Key informants suggested that stigma and disinvestment has had a variety of impacts (KI-6; KI-10; KI-13; KI-15). One key informant suggested that small businesses or companies are reluctant to have stores in the area, for fear that no one in the area could afford to shop there, or simply because they do not want their stores across from poorly maintained buildings (KI-6). The same key informant suggested that schools can also become jeopardized:

Teachers don't want to teach at substandard schools. We had [name of elementary school] close down because parents didn't want to send their kids there because right across the street there's non-profit housing or apartment buildings that are just not up to code, so of course who can afford to rent those are poor people (KI-6).

Focus group participants also noted that schools in Rexdale, and the nearby area, had low rankings, and as a result, that students that lived and attended school in the neighbourhood had less of a chance of getting accepted to colleges and universities (FG2-3, FG2-4). Focus group participants and key informants noted that there should be more investment in education and that there are few facilities that offer programing or job opportunities for youth within the neighbourhood (FG2-1, FG2-3, FG2-4, FG2-5, FG2-6). One key informant noted that youth issues in Rexdale have been responded to with increased policing, rather than more investment in environments and facilities that support the community and its youth (KI-6).

Another key informant mentioned postal code discrimination, where living in Rexdale means you are less likely to get a job, even locally:

The other impact of living in Rexdale itself is postal code discrimination, the lack of ability to find employment opportunities even in your own community...a lot of residents were saying that it was hard to even apply to get a job as a teller at the bank at the mall. And instead...they were hiring from all these other areas, and obviously there's probably some stigma that's been attached to the community (KI-13).

Although they agreed that more investment in the community is necessary, focus group participants were largely satisfied with the transportation in the neighbourhood, as well as the grocery stores and parks nearby. One focus group participant reported that having a car was not necessary in the neighbourhood (FG2-7). Additionally, participants appreciated the services offered at the Rexdale Community Hub, including health care and senior programs, but, several key informants and focus group participants mentioned that social services and other resources

were concentrated in one part of Rexdale, making access harder for residents in other areas of Rexdale (FG2-3, FG2-4). Similarly, focus group participants noted that in certain areas of Rexdale, transit was less reliable and wait times could be 30 minutes (FG1-10 FG2-1; FG2-2). As a result, a focus group participant mentioned a car might be necessary in some areas (FG2-1). In contrast to many focus group participants which had a positive or mixed view of transportation in Rexdale, the majority of key informants, who interact daily with a larger sample of newcomers, had a negative view of existing transportation:

In these communities, we can't rely on public transit because it's so bad...we're told, "oh you should be using public transit, like you're a better citizen if you use public transit, and you don't drive." And then there's this idea that it's a luxury to drive. It's not a luxury to drive, up here it's a necessity (KI-12).

You can't get anywhere. If you're a parent, you have to drop your kid to school or daycare first before you go to work. So your work is already so far, like you're spending how much time, how many hours of your day just traveling?...I think there needs to be more transit, not only for people to get from Etobicoke to downtown but like within Etobicoke itself, for people to be mobile within their own community (K-13).

One key informant also mentioned that with the reduction in local businesses, banks, and other services over the years, bus lines have also been reduced (KI-6). This same key informant also noted that there was discussion among local officials to reduce bus service between Rexdale and a local university, noting how this could stifle educational opportunities, as well as arguments by local officials that transit improvements couldn't be made within Rexdale due to costly projects elsewhere in the City (KI-6).

At the neighbourhood scale, Rexdale has recently experienced an increase in development. This has included the conversion of an existing racetrack into a full casino, and a new light rail transit line that will run through parts of the neighbourhood (both projects are under construction). As a second phase of the Woodbine Casino project, luxury housing is expected to be built (KI-12, KI-13). There have also been new condos built separately from the Casino, and conversions of rental buildings into condos (KI-2, KI-6, KI-9).

Associated with the increased development in the neighbourhood is a fear of gentrification, displacement and rent increases. In the case of light rail transit development,

focus group participants in the second focus group and key informants noted negative anticipated impacts of the project, including increased housing and transit prices, as well as increased traffic while construction is underway:

The reality is a lot of the elderly people in the neighbourhood are dying and their houses are being sold and the houses are very expensive. But if they put in transportation - someone is willing to buy a house further out but travel downtown, it's going to raise the prices so much (KI-2).

So, in one sense you'd be able to travel and get jobs...you'll be able to go to school with accessibility and no longer take an hour and a half to get downtown...But that means transportation cost is going to go up, right? That's the only thing. (KI-1).

Another key informant noted that transit associated with the Woodbine development did not improve bus service or mobility within Rexdale, as it seemed to be catering to Casino visitors and tourists, rather than the local community (KI-6). Several key informants specifically mentioned concerns about gentrification or displacement resulting from both development projects:

Woodbine, they're building new condos, there's going to be more investments in the Etobicoke area because of the race tracks... And so, then the college.... What does that mean for individuals that live in the area, does that mean they're going to be moved out somehow because they can no longer afford the area? (KI-1)

The concern that comes up with light rail transit, that it's a double-edged sword. Mass rapid transit help improve mobility but they could also drive up property values and increase rents, which increases the cost of living, and eventually, causes displacement. And which residents are displaced? Often, it's the most vulnerable people in our communities – people living in poverty and the working poor along with seniors, newcomers, and other marginalized groups. So how do we make sure that our Planning Division, our Economic Development Division, and the other departments at the City of Toronto that are involved in the technical pieces of building the City's hard infrastructure and increasing the density of our neighbourhoods are working with the City departments responsible for the social infrastructure, e.g. Public Health, Parks & Recreation, local employment, and social development? If we are trying to ensure Toronto is truly resilient, the focus we are putting on maintaining good roads, sewers and power grids across the city, we need to put just as much effort to local neighbourhood resiliency efforts such as local employment, equity and other social justice issues. So that's the conversations that we have, right? And so, will light rail transit be a benefit for neighbourhoods that struggle with poverty, violence and oppression? We hope so. I mean that's what the plan promises, but in order for that to

become a reality, we need to make sure that the technical plans for the City are being developed, hand in glove, with the social infrastructure plans happening at a local level... and if we start to see that plans for intensification in a neighbourhood is causing displacement, how do we make sure we adjust the development plans early enough to prevent that? (KI-14)

One positive result of new developments in the community, notably the Woodbine Casino, was the opportunity for Community Benefit Agreements to be negotiated between developers, the City, and the local community to provide benefits to residents in recognition of potential disruptions to surrounding communities that may be associated with proposed new developments:

If you're bringing it to my community, then we should be able to get something positive out of it. And as a result, we're saying that there must be daycare...And also we're asking that a certain percentage of the jobs be given to our neighbourhood, to North Etobicoke. Because for one, you're bringing gambling to our community, you're bringing drugs. There will be drugs. So, our community is going to go down. So as a result, we must see something positive coming out of it. (FG2-P1)

Key informants noted that, as a part of the Woodbine Casino project, the community was able to negotiate employment opportunities with targets for local hiring including for administrative, technical and managerial positions, in addition to entry-level work (FG2-1, KI-9, KI-12, KI-13, KI-11). The former is regarded as particularly important, as many newcomers enter Canada with a high level of skill or education, but can have a hard time securing employment (KI-13). Key informants and individuals from the second focus group also noted that the expansion of light rail transit would allow for increased accessibility to jobs and shorter trips to local colleges and universities or the downtown area (KI-1, KI-10, KI-13, KI-14)

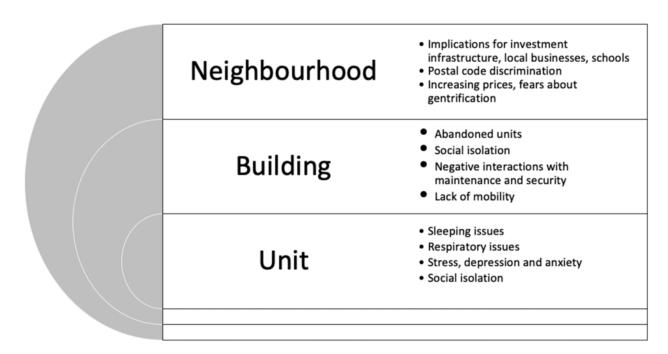


Figure 2. Impacts of environmental conditions, examples at multiple scales

2.7 Discussion and conclusions

This research focused on the housing and neighbourhood environments experienced by immigrants and newcomers in Rexdale, as well as the impacts of these environments on individuals, families and community. Our in-depth qualitative approach assisted in emphasizing the voices and detailed lived experiences of immigrant populations. Our findings build on previous studies which have utilized a quantitative approach to analyze associations between characteristics of immigrants' housing and health outcomes (Litt et al. 2009; Standish et al. 2010; Oudin et al. 2016) and studies that have documented the barriers to obtaining housing or immigrants and newcomers' housing careers (Teixeira 2008, Murdie 2010, Firang 2019).

By providing a qualitative approach which centers the lived experiences of immigrants and newcomers, we contribute a more in-depth understanding of the reality of living in substandard housing and neighbourhood conditions, while giving a human face to the more commonly cited statistics and measures. For example, while Oudin et al. 2016 observed mould in 40% of low-income and recent immigrants' housing units and Litt et al. 2009 found that 27% of Mexican immigrants' homes had more than one environmental hazard, we were able to present vivid descriptions of these issues. Further, our findings reveal reported cumulative impacts that can result when deprivation and injustice is experienced at multiple scales (i.e.

housing unit, building, and neighbourhood), often exacerbated by stressors related to the settlement experience. It is meaningful to document the daily experiences, for example, of mothers who return home from grocery shopping to find elevators out of service and that they must climb multiple flights of stairs with their groceries and child to their apartment that is in non-working order with environmental hazards. This begins to shed light on how or why certain health impacts may arise in association with poor conditions over time, eventually manifesting into what some have described as the "embodied" biological and psychosocial impacts of inequalities and racialization (Krieger 2016; Gravlee 2009). Further, the accounts of our study participants begin to illuminate the unique experiences of particularly vulnerable sub-groups within the immigrant community, including those without status, seniors or those with mobility issues.

Our findings contribute to research focused on the interactive impacts of environmental conditions at various scales (Lejeune, Xhignesse, Kryvobokov and Teller 2016; Baker et al. 2017; Jones-Rounds, Evans and Braubach 2018) by focusing on the experiences and impacts as they pertain to immigrants and newcomer sub-populations specifically in Canada. Our findings suggest that the cumulative impacts of chronic housing issues, poor treatment by landlords or others, and post-traumatic stress due to experiences in home countries or during migration, make the impacts of housing and neighbourhood environments unique in immigrant communities. These findings contribute to the dearth of research examining how social-structural conditions increase the vulnerability of certain populations to harmful living conditions (Rauh, Landrigan and Claudio 2008).

In contrast to Logan and Murdie (2016) who examined living conditions and experiences of Tibetan immigrants living in Toronto (who largely reported being satisfied), our focus group and key informant study participants indicated that many immigrants and newcomers in the Rexdale area are enduring hazardous conditions within their housing units, in addition to disinvestment and harmful stigmas at the neighbourhood scale and new developments that threaten to increase already unaffordable housing prices. Logan and Murdie (2016) utilized a mixed methods approach, including a survey and photovoice methods. For the survey, the researchers utilized a subset of survey data from the University of Toronto in which residents of

high-rises were randomly selected from assessment rolls (Logan and Murdie 2016). It is possible that our findings differ due to our relationship with community partners that had pre-existing relationships or reputations of trust among study participants, and whom provided a safe space for participants to voice their concerns and opinions away from the eyes of landlords or property managers. We acknowledge the limitations of our sample size. While works like Logan and Murdie (2016) provide a more statistically significant sample, surveys may not always be the best approach for populations who often fear retribution for sharing their true experiences or have a history of corruption or lack of trust with certain authorities. Focus groups can be particularly effective in establishing trust and rapport with diverse minority groups with historically limited power (Kidd and Parshall 2000; Umaña-Taylor and Bámaca 2004), and key informants, many of whom were immigrants themselves were able to draw upon their own previous lived experience and/or their professional insights gained from working day to day with immigrant populations struggling with poor environmental living conditions.

While Ghosh (2014) was more focused on social dynamics within "vertical neighbourhoods", we similarly found that there is often a lack of community space within high-rise towers and that as a result, groups gather in lobbies or in public spaces like a food court at the local mall. Similar to tenants in Ghosh's (2014) study population, many of our participants expressed that informal socializing is often restricted in these other public areas throughout the neighbourhood, which can lead to greater risk of settling into social isolation.

Our findings also document the changing conditions within Rexdale, including increases to already unaffordable rental prices, further brought on by new developments including the Woodbine Casino, luxury condos, and light rail transit. Focus group participants, who are already dealing with substandard conditions and unaffordable rents, are now fearing even higher rent increases. Other studies including one focused on a Latino community in the City of Chicago have documented the concern that improvements in neighbourhood's environmental conditions, (many of which came about as a result of Latinos' self-organization and advocacy), are now raising concerns about displacement and the inability of residents to stay in place to enjoy the benefits of the improvements they have organized to make (Kern and Kovesi 2018). The authors assert that, "if a community is displaced as others seek to take advantage of newly

cleaned and greened areas, the environmental injustice is compounded and likely to repeat itself as residents are pushed to even less desirable locations" (Kern and Kovesi 2018, p. 960).

Jones-Rounds, Evans and Braubach (2018) found that higher neighbourhood quality can help to reduce the impacts of poor quality housing. For example, spending time in urban greenspace and participating in outdoor activities has been shown to dampen the negative impacts of substandard housing for immigrant populations (Hordyk and Richard 2015). Further, community gardening can help African refugees gain community connections in their new country (Harris, Rowe and Somerset 2014). Yet concerns from recent research suggests that without mindful, protective measures, neighbourhood improvements towards higher quality environments can also increase risks of displacement. Researchers have raised concerns that community gardens (McClintock 2014), organic grocers (Anguelovski 2015), and other sustainable infrastructure, such as transit oriented development, can aid gentrification and associated displacement (Chapple et al. 2017). This concern points towards the importance of exploring and documenting how or why inequitable housing conditions are produced in the first place, as well as the actions immigrants and newcomers in Rexdale are taking (or not) to improve their own communities. Further, it points to the need for policy makers to ensure that alongside "green" infrastructure and improvements, affordable housing is built, to allow longtime community members to stay in place (Gould and Lewis 2018). Research has also documented that Latino community organizers have utilized a shared ethnic background to increase advocacy and participation in redevelopment projects (Sandoval 2018). It is worth exploring what vision residents of Rexdale, and similar communities, have for their home and neighbourhood environments and how they are attempting to make improvements, alongside affordability and gentrification pressures. It is also necessary to understand obstacles that individuals and community groups encounter in attempting to make positive changes to their environments.

3. CHAPTER THREE: PROCEDURAL ENVIRONMENTAL (IN)JUSTICE AT MULTIPLE SCALES: EXAMINING IMMIGRANT ADVOCACY FOR IMPROVED LIVING CONDITIONS

ABSTRACT

Distributional injustices have been documented by many environmental justice scholars in recent years, while procedural justice issues remain less explored. For instance, immigrants and newcomers disproportionately experience substandard housing conditions and discrimination in the housing market, but few studies have examined how immigrant communities are seeking to improve their living conditions or engage in related governance and advocacy processes. Drawing upon interviews and focus groups with residents, community organizers and representatives from social service agencies in Rexdale, an inner suburb of Toronto, this paper examines how immigrants and newcomers are reacting or taking action to improve conditions in a high-rise neighbourhood at the scale of their housing units, high-rise buildings and neighbourhood. Through a procedural justice lens, cumulative, multi-scale injustices experienced by immigrants and newcomers are revealed. Findings reveal obstacles and barriers that are preventing immigrants from engaging in advocacy and other means of improving their living conditions, in addition to opportunities for increasing newcomer participation in housing and neighbourhood improvement efforts.

3.1 INTRODUCTION AND OBJECTIVES

Over recent decades the importance of environmental conditions in shaping health and well-being has become increasingly apparent at both housing-unit (Dunn and Hayes 2000; Matte and Jacobs 2000) and neighbourhood scales (Renalds, Smith, and Hale 2010; Dannenberg, Frumkin, and Jackson 2011; Masuda et al. 2012). At the housing scale, healthy environmental conditions include a dwelling that is in good structural condition, free of mould, pests, harmful chemicals, and equipped with adequate temperature control, lighting, ventilation, water, electricity, sewage/waste disposal, and security from intruders (Rentsafe 2015). At the neighbourhood scale, environmental attributes influence health through shaping

patterns of social interaction, access to public services, greenspace and/or transit (Bryant, Raphael and Travers 2007; Masuda et al. 2012).

Inequitable access to healthy living conditions is an environmental justice issue given some groups due to their ethnicity, race and/or socio-economic circumstances are disproportionately subjected to higher levels of environmental risk or burden, and/or limited access to environmental goods and services (Schlosberg 2007). There is a solid evidence-base documenting inequalities in environmental conditions at both housing-unit (Dunn and Hayes 2000; Friedman and Rosenbaum 2004) and neighbourhood scales (Hulchanski 2010; Walks 2010; Hipp and Lakon 2010) albeit these scales have historically been studied independently) (Jones-Rounds, Evans and Braubach 2014).

Recent immigrants, visible minorities and refugees are among the most housing deprived and at risk of living and/or remaining in hazardous conditions (Hiebert 2010; Paradis, Wilson, and Logan 2014). Concomitantly environmental quality varies across cities at the neighbourhood level in association with variables such as race, ethnicity, immigrant status, and income (Mohai, Pellow and Roberts 2009; Hulchanski 2010; Walks 2010; Amar and Teelucksingh 2015). Related impacts upon immigrant populations at both the housing or neighbourhood level is becoming increasingly well documented (Litt et al. 2010; Wang 2014). Yet little attention has been given to the processes and factors contributing to the production and/or reinforcement of inequitable environmental living conditions (Pearsall and Pierce 2010), particularly from the perspective of immigrant populations. This is despite the fact that we know immigrants face unique challenges in accessing healthy housing conditions (Grineski and Hernández 2010; Mensah and Williams 2014), and cumulative stressors relative to other marginalized populations due to their migratory, settlement and integration experiences (Ng, Wilkins, Gendron and Berthelot 2005; Newbold 2006). Further, marginalized groups are more likely to be excluded from decision-making processes that shape neighbourhood living environments, and be subject to power dynamics that may dissuade engagement in action for change (Masuda, Poland and Baxter 2010; Grineski and Hernández 2010; Masuda et al. 2012; Pellow 2017). Exclusion from decision-making, contributes to structurally unjust systems, which results in some communities receiving little investment in environmental improvements and/or disproportionate shares of environmental burdens (Amar and Teelucksingh 2015).

Environmental justice scholars have been calling for greater attention to procedural elements of injustice in addition to distributional elements (Schlosberg 2007; Walker 2009). Procedural justice is concerned with whether decision-making is fair, transparent and inclusive and distributional with where risks and benefits ultimately become situated across society and space (Schlosberg 2007). The latter has received more scholarly attention likely because distribution is easier to quantify (Pearsall and Pierce 2010).

This paper examines the lived experiences and procedures through which immigrants and newcomers take action (or not) to improve environmental living conditions at multiple scales. Specifically we examine barriers preventing immigrant and newcomer groups from engaging in processes to improve their housing and neighbourhood environmental conditions, in addition to opportunities for increasing their influence. We begin by synthesizing what is known about the subject from diverse fields including: urban planning, housing, immigration, geography and environmental studies. This is followed by a description of our study setting and methodology, findings, and discussion of implications.

3.2 LITERATURE REVIEW

Procedural environmental justice is underexplored within housing studies, and immigrant health research. The limited literature that does exist suggests immigrants face unique barriers to engaging in self-advocacy or remedial action for improved housing conditions (Grineski and Hernández 2010; Teixeira 2014; van der Poorten and Miller 2017). In their case study of South Phoenix, Arizona, a region where much of the population is Latino, African-American and/or low-income, Grineski and Hernández (2010) identify fear of deportation and eviction, language barriers, poverty, and a lack of formal lease agreement as deterrents to issuing complaints to landlords or seeking legal help. Further, awareness of tenant rights and the health impacts of substandard conditions was not sufficient in initiating self-advocacy when fear was present (Grineski and Hernández 2010). Canadian studies in large (Vancouver, British Columbia) and mid-sized (Calgary, Alberta) cities have similarly found that immigrants living in illegal secondary suites were dissuaded from self-advocacy due to

problematic power dynamics involving landlords (Teixeira 2014; van der Poorten and Miller 2017).

Studies focused on residents of public housing in the United States identified factors that shape the likelihood of participating in tenants' associations to advocate for improved living conditions. Conway and Hachen (2005) found number of grievances, length of residency, social connections within housing developments, education, and voter registration status to be significant determinants of involvement. Dahmann and Dennison (2013) found that shared experiences and concerns, and the availability of translators encouraged collaboration between tenants of different ethno-cultural backgrounds. Yet these studies did not focus on immigrant populations specifically and it remains uncertain whether factors that enable or constrain participation in tenants' associations or other advocacy processes persist across different immigrant groups and urban contexts.

At the neighbourhood scale, urban planning researchers are recognizing that immigrant populations are poorly represented within processes of neighbourhood redevelopment. Ineligibility to vote, cultural and language barriers, racial tensions, education levels, unfamiliarity with the legal system and a lack of representation in outreach, consultations and planning departments are common barriers (Harwood and Myers 2002; Theodore and Martin 2007; Kondo 2012; Poppe and Young 2015).

Power discrepancies between those influencing local redevelopment policy and those disproportionately impacted by its effects has been observed in multiple North American cities (e.g. Calgary, Toronto, Santa Ana) with the majority of participants in urban planning design charrettes, neighbourhood associations, and local meetings, being native-born residents who occupy single family dwellings and reside in lower density residential areas. Anti-immigrant or pro-gentrification sentiments were evident in each case (Harwood and Myers 2002; Poppe and Young 2015; van der Poorten and Miller 2017). During a design charrette focused on high-rise tower redevelopment in an inner-suburb of Toronto, homeowners and representatives from development companies dominated the conversation and advocated against density and in favor of beautification and upscale retail. These changes were not conducive to the needs of immigrant and low-income residents (Poppe and Young 2015).

Other scholars have recommended strategies for fostering inclusive neighbourhood planning, including undertaking consultations at community hubs at convenient times for working-class residents, or using tools like e-consultation or community informatics (Kondo 2012; Ferilli, Sacco and Blessi 2016; Nugent 2017). Evidence of the effectiveness of such tactics in engaging immigrant populations remains limited.

In summary, at the housing scale, there is an emerging body of literature that considers tenants' abilities to engage in various "procedures" and actions to improve living environments. Few studies focus on the actions and experiences of immigrant populations specifically, particularly within Canada, a country with high rates of immigration. Additionally, there is a growing body of literature on the inclusion/exclusion of immigrant communities within planning and renewal processes at the neighbourhood scale. There appears to be a general disconnect between research and practice focused on environmental living conditions at the housing unit scale, and those focused on changes at the neighbourhood scale. We suggest these scales must be considered together to gain a more comprehensive insight into factors that may be shaping immigrant power and influence over environmental conditions.

3.3 METHODS

3.3.1 Case study context

Our study focuses on Rexdale, an ethno-culturally diverse inner suburb of Toronto located north-west of the downtown. Our understanding of Rexdale's boundaries evolved as we spoke to community members with different perceptions of their neighbourhoods than City-defined boundaries, a common phenomenon (Coulton, Korbin, Chan, and Su 2001). According to the City of Toronto website, neighbourhood boundaries "were made to make [census] data in the profiles useful to as many users as possible, and are not intended to be statements or judgments about where a neighbourhood starts or ends" (2019). We recruited adult immigrant residents that self-identified as living in a high-rise building in the Rexdale neighbourhood to participate in focus groups. Key informant interviews were conducted with representatives from service agencies self-identified as located in Rexdale or working with members of the Rexdale community. As a result of this self-identification, our understanding of Rexdale is comprised of six smaller government-defined neighbourhoods: Mount Olive-

Silverstone-Jamestown, Thistletown-Beaumond Heights, Rexdale-Kipling, Elms-Old Rexdale, Humber Summit and Humbermede. These smaller neighbourhoods, with the exception of Rexdale-Kipling, have been identified by the City as Neighbourhood Improvement Areas, slated for priority investment due to low levels of economic opportunity and participation in decision-making, in addition to community health, physical environment and/or infrastructural concerns (2018).

Throughout the 1950s, 60s and 70s, Rexdale experienced a significant increase of highrise housing developments built to serve low-income families (Hulchanski 2010; Ghosh 2014). Since then, these aging high-rise structures have not received much public or private reinvestment. Racialized immigrant populations are concentrated within high-rise buildings in disrepair and neighbourhoods with poor walkability, low access to transit, and limited economic opportunities (Hulchanski 2010; United Way 2011). Many immigrant families live within these buildings for prolonged periods, due to their relative affordability, larger-sized family-friendly units, proximity to ethnic retail or institutions, and scarcity of alternative housing supply (Ghosh 2014; Hiebert 2010).

In an effort to revitalize neighbourhoods, City-wide initiatives such as the Toronto Strong Neighbourhood Strategy and Tower Renewal Program have been implemented. According to the City of Toronto website (2019) the Toronto Strong Neighbourhood Strategy targets 31 Neighbourhood Improvement Areas, including 5 in our case-study area. The strategy has established 15 Neighbourhood Planning Tables comprised of multiple stakeholders, including the Rexdale Neighbourhood Action Partnership. Local residents established the North Etobicoke Residents' Council as a platform to provide a unified resident voice at the Planning Table. The City's Tower Renewal Program assists owners and residents of aging high-rise towers in making improvements to the building and its surrounding environment. The program aims to foster reinvest in high-rise communities and foster collaboration between owners, management and residents.

Many social service agencies and community organizations are concentrated at the Rexdale Community Hub, which opened in 2012 in an effort to integrate health, social, legal, employment, and cultural service provision. Recent development across the region, including a

casino, condo housing and light rail transit, has the potential to bring services and jobs yet has introduced gentrification concerns.

3.3.2 DATA COLLECTION AND ANALYSIS

Data collection involved two focus groups with immigrants living in high-rises in the Rexdale area and key informant interviews with representatives from social service agencies including immigrant, settlement and housing agencies, legal aid, and organizations involved in promoting tenants' rights, community benefit agreements with developers and/or improvements through the City's Tower Renewal program and Toronto Strong Neighbourhood Strategy

Recruitment of key informants (N=23) involved purposive sampling with participants identified through publicly available documents and websites, combined with snowball sampling (Crabtree and Miller 1999). The recruitment of focus group participants (N=20) was facilitated by the Rexdale Women's Centre, an immigrant settlement and social service agency, and the North Etobicoke Residents Council.

The first focus group consisted of nine females and three males and the second consisted of two males and six females. Focus group participants' countries of origin included: Somalia, India, Jamaica, Nigeria, Iraq, Pakistan and Syria. Arrival in Canada ranged from the 1980s to the 2010s. The majority of focus group participants were renters with many living in social housing. Three participants owned high-rise condos.

Focus group participants were asked about the environmental conditions of their buildings and surrounding neighbourhoods, related impacts, attempts to take action to address living environments, barriers and challenges faced and opportunities or benefits gained, in addition to knowledge about existing initiatives through which residents can initiate change over their living environments. Key informant interviewees were asked similar questions and described their experiences assisting immigrant groups in improving their living environments. Audio recordings of interviews and focus groups were transcribed and thematic analysis was completed with the assistance of NVivo software. Member-checking was completed on both an individual basis for interviews and through a public presentation and open dialogue around preliminary findings involving local residents and stakeholders.

3.4 FINDINGS: ACTIONS, STRATEGIES AND BARRIERS TO IMPROVING LIVING ENVIRONMENTS

Throughout the findings section, "FG1" and "FG2" delineate contributions from
participants who took part in the first or second focus group, followed by a unique participant
number. "KI" signifies contributions from key informants.

Insights from focus groups and interviews suggest some immigrant residents are attempting to improve conditions not only within their individual high-rise units, but also at the high-rise building and neighbourhood scale (see Figure 3 for examples). Participants identified several barriers that may prevent or reduce the efficacy of actions taken, and/or personal agency of immigrants. Several limit effective action at multiple scales, and some barriers are more unique to unit, building, or neighbourhood scales (see Figure 4 for examples). Strategies and barriers are summarized below according to the scale of living environment immigrants and newcomers are attempting to change.

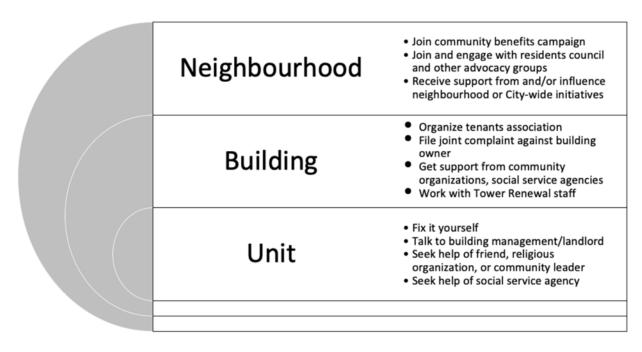


Figure 3. Examples of actions and strategies taken in attempts to improve environmental conditions at multiple scales

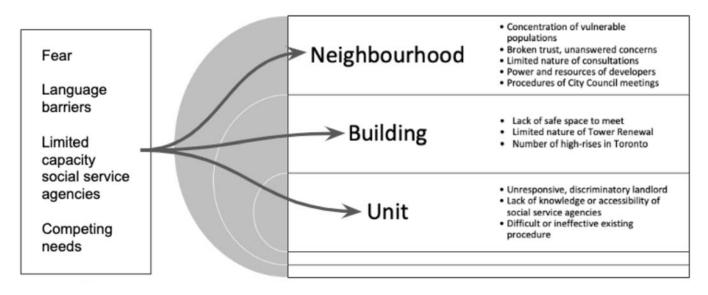


Figure 4. Obstacles and barriers to improving environmental conditions at multiple scales

3.4.1 HIGH-RISE UNIT SCALE

The majority of focus group participants and interviewees reported that tenants have a difficult time getting maintenance issues resolved through their landlord even when there are hazardous conditions, such as mould (FG2-P1, FG2-6), bed bug infestations, heating issues, broken balcony doors during the winter months (KI-8, KI-9) and/or plumbing issues (e.g. no running water, broken toilets) (KI-2). Landlords and property owners were described as careless (KI-8, KI-5, KI-6), rude (FG2-1, FG2-5, FG2-6, KI-9) and discriminatory (FG2-1, FG2-6, KI-15). One participant mentioned that racialized men who attempt to speak to landlords or property management run the risk of having the police called on them and being stereotyped as "aggressive" (FG2-1). A minority of participants expressed that some landlords or building management are more helpful (FG1-10, FG2-2; KI-5).

Several focus group participants shared tactics they have used to compel their landlord to take action. One participant began putting all requests in writing at the suggestion of a friend (FG1-9). Another repetitively reported unsuitable conditions to a municipal hotline dedicated to filing property concerns (FG2-1). While the hotline was identified as useful because it compels

the city to investigate in some way, many residents were unaware of it. Others commented that only severe cases received follow-up (FG2-1, FG2-6).

Several residents indicated that they often resort to fixing things themselves because their landlord takes too long, (FG2-1, FG2-6, FG2-7) or puts the onus on tenants to perform maintenance and repairs (FG1-1, KI-8). Participants expressed frustration over not being reimbursed for costs, with one emphasizing how many tenants cannot afford to make repairs themselves (KI-8). One individual explained that their tenants' association is advocating for a regulation that would force landlords to repay tenants who have made repairs.

A number of key informants explained how immigrants often rely on friends and community leaders to help them address issues in their housing unit before exploring alternatives (KI-2, KI-3, KI-9, KI-15). Some cautioned this can be "disastrous" due to misinformation (KI-9) or peers not being in a position to help in meaningful ways:

Within the Somali community, the majority are still in [social] housing. They're still in high-rises... How are you able to help another newcomer if you're still in that dire poverty situation? They can only give information that they know, and if they don't know any information, then that's like blind leading the blind (KI-15).

Multiple key informants explained how community leaders often end up referring immigrant peers to social service agencies (KI-4, KI-6, KI-8).

A leader in the Syrian or Iraqi community will want their community to go to them first, because that's how their communities are structured. But there will be a point at which they'll say, "Yeah, I can't solve that one, you need to go to the [elected official's] office."...And that way it will end up getting sent back to us by the [elected officials'] offices that know what we're here for (KI-8).

Some argued that the involvement of a social service agency can bring legitimacy to a tenant's request; "the landlord is actually going to care because it's not just someone who doesn't have [legal immigration] status, but now it comes with a name... someone professional" (KI-2). Others explained that the involvement of social service agencies can sometimes result in backlash to both tenants and agencies. One key informant spoke about their experience in being perceived as "the enemy" by management and how some tenants experience increases in neglect of maintenance issues following their involvement (KI-6). Another reported tenants may experience overt forms of intimidation, with reports of landlords threatening eviction (FG2-1, KI-9) or hiring individuals to knock on doors and say, "'if you complain or you put in a

work order to fix your apartment, we'll evict you and you'll be homeless.'... immigrants are mortified and afraid" (KI-15).

Misunderstandings about authority, the legal system, tenants' rights, and fear of immigration statuses being revoked or revealed can exacerbate fears about seeking help through existing procedures (e.g. city hotline) to remedy poor conditions (FG2-4, KI-8, KI-9, KI-7). Participants in both focus groups reported that fear prevented action, particularly for those lacking legal immigration status (KI-2, KI-5), recent arrivals, those unable to speak English (FG2-3, FG2-4), and those who have survived trauma in their home countries (KI-15). As one key informant elaborated:

Newcomers that don't have status or are waiting on their Permanent Residency are far less likely to go to the Landlord and Tenant Board or the Ontario Human Rights Tribunal...They'd have to file an application and appear in front of a judge, and concerns around that are: is this going to somehow affect my immigration status?...And a whole host of language and understanding barriers. My English isn't super good, can I stand in front of a judge and pitch a case on the Residential Tenancies Act? That's hard for me, [even] being a tenant expert right? That would be hard for any tenant much less one that faces language barriers (KI-7).

Other barriers to seeking the help of an agency include physical accessibility, transportation costs, and lack of knowledge that support exists (KI-8, KI-5, KI-10, KI-15). For example, two Somali focus group participants reported that much of their ethnic community is located further from the Rexdale Community Hub, where a range of social service agencies are located, and consequently, they have less access to and knowledge about available supports (FG2-3, FG2-4).

Key informants reported that clients may be coping with an issue for an extended period, and not seek help until they are in a crisis (KI-2, KI-8, KI-5). This causes cascading issues given filing formal complaints requires months of repeated written requests to landlords, receipts proving expenses (e.g., buying food at restaurants because the fridge or stove is broken) and other documentation of which tenants are often unaware (KI-7, KI-8, KI-9). Participants have been told that their building does not permit written requests (FG1-3) and/or they are unable to write in English (KI-5).

They are so angry and dismayed when we tell them... 'I'm sorry that you made six or eight phone calls and have had conversations and dropped into the office, but I

guarantee you there will be no record of that when you get to the Tribunal. You have to have a record.' The amount of money you can claim in rent abatement cannot start before you have established the written record (KI-9).

Key informants spoke of various supports needed to ensure newcomer populations are equitably protected from adverse environmental housing conditions (e.g. attending and/or assisting immigrants with going to the Landlord and Tenant Board, navigating confusing legal or government systems, connecting people to legal aid, and/or preparing written documents). There was a broad consensus amongst key informants that the level of need far exceeds their collective capacity to provide support due to limited staff and budgets. Many stressed larger systemic issues:

Landlords can get these top lawyers to fight, or... Let's say the City puts them on fee for bed bugs or mould infestation, they'll pay the fee. There's no accountability for these landlords to stop doing what they're doing. (KI-15).

There's a lot of anger. There's a sense of hopelessness about improving their living conditions. They know they can call the City. They know they can take the landlord to court. But those things can be difficult or ineffective. So there's just really a feeling that they can't move because...we're in the middle of a housing crisis in Toronto...they feel kind of stuck. (KI-7).

For some this is resulting in individuals attempting to change their living conditions through collective action at broader scales.

3.4.2 HIGH-RISE BUILDING SCALE

Within several of the high-rise buildings, there are tenants' associations that provide tenant education and attempt to advocate for building-wide changes. While these are mostly tenant-led, they typically receive and/or require support from various agencies including Legal Aid, the Tower Renewal Program, the Toronto Strong Neighbourhood Strategy, the Federation of Metro Tenants' Associations (FMTA), and the Association of Community Organizations for Reform Now (ACORN). The City initiatives are focused on working with residents to improve conditions. FMTA provides services such as a tenant counselling, referrals, and educational outreach on tenants' rights, while ACORN provides advocacy training and support. Engagement with these organizations has enabled tenants' associations to secure building-wide repairs, advocate against above guideline rent increases, file joint complaints on behalf of multiple

residents, and increase resident involvement in the City's Tower Renewal projects (KI-7, KI-8, KI-14). Tenants' associations have also advocated for changes surrounding their buildings (e.g. safer sidewalks, bike lanes) (KI-7, FG2-1). A key informant asserted that when you have multiple residents grouped together, you have more power and can generate greater impact (KI-8).

A manager with the City Tower Renewal initiative shed light onto the support role they have been playing in supporting collective action:

We were able to... do some very significant resident engagement in two towers and out of that has come a very vibrant tenants' association that's still alive to this day and that we continue to work with. They're involved in looking at: What are some of the resident issues? How can a lot of the solutions and improvements be resident led? And we have managed to get them a dedicated apartment unit that turned into a tenants' associations' office...that really helped for bringing people together. (KI-14).

A focus group participant residing within one of the aforementioned buildings echoed the importance of this support. Others explained that while city-supported initiatives to secure building improvements can be beneficial, changes do not always reflect tenants' priorities and can result in increased rents.

In spite of the government giving grants to the landlord to fix the building, what is usually done is they'll fix the common areas like the lobby...we've been asking the City, "can you please when you give money to management, can you also involve the tenants' association?"...so that we are part of the overall managing how the funds are used because it's taxpayers money...So far we have not gotten anywhere past them just dishing out money to [property owners] (FG2-1).

Another mentioned that similar concerns were common in buildings undergoing energy retrofits; "the tenants don't get any benefit from that, so there's a building improvement, but savings go to landlords, and in terms of negative impact it's pretty significant in terms of living through construction" (KI-7).

Many barriers that prevent some immigrants from advocating for change at individual housing-unit levels, also undermine coordination between immigrant residents at the building level, with fear being the most persistent.

Our tenants' association would go door to door and we would get people to meet with Legal Aid Clinic in the [Community] Hub to file complaints on management. But when it comes time for them to come out and actually meet with Legal Aid, they're scared...because management actually threatens, especially people who English is a

second language...that they will give them eviction, so people are afraid to come forward (FG2-1).

Language barriers, job or family responsibilities also limit action (KI-5, KI-8). Further, those coping with domestic violence or other crises are unlikely to have the capacity to engage (KI-1).

An additional challenge is securing a safe and convenient place for residents to meet where landlords or management cannot overhear or take note of who attends (FG2-1). Community space within buildings rarely exists, and often tenant organizers or social service agency staff may not be welcomed by landlords or management (FG1-2, KI-6, KI-8, KI-9). As a result, the space available in the Community Hub is vital alternative for tenant organizing.

3.4.3 Neighbourhood scale

Examples of actions addressing conditions and changes at the neighbourhood scale include advocacy around housing affordability, participating in community benefit agreements with developers (e.g. in response to an incoming casino and light rail transit), and advocacy against predatory money lenders becoming established in the neighbourhood (FG2-1, FG2-8, KI-2, KI-12, KI-13). Some of these efforts have had success, including a community benefit campaign involving developers of an incoming casino, which involved securing funding for a childcare center, hard targets for local and diverse employment, apprenticeship opportunities, and minimum annual operational procurement from local and diverse suppliers (KI-12, KI-13).

Organizing efforts at the neighbourhood scale requires residents to navigate and overcome procedural barriers at multiple scales of engagement from personal to systemic. Certain individuals are particularly vulnerable, especially those in crisis or without legal status. Other barriers impact entire neighbourhoods. For example, transience can undermine neighbourhood-level organizing as immigrants move on from this 'gateway' neighbourhood to other parts of the city, which can mean "the community doesn't get built" (KI-15) or residents do not have as much history working together as other neighbourhoods in the City (KI-2). Another dynamic that may impact organizing is how the City is "segregate[d] based on class, based on identity, so you have a large proportion of women who are vulnerable, who are marginalized with low-income segregated in these particular areas" (KI-2). Consequently, the power and influence of neighbourhoods in Toronto is unequal, and as an informant familiar

with tenant organizing explained, neighbourhoods that demand and receive in-depth consultations are often wealthier.

Many of the barriers to building-level activism identified by study participants persist at the neighbourhood level, including not having the capacity to engage, particularly when in crisis (KI-1, KI-15). One key informant relayed a recent question an individual asked them:

How are we going to be civically engaged... when we're struggling to pay the bills, to feed our family, and we're wondering how are we going to sleep in an apartment full of mould and infestation? (KI-I)

Additional barriers to neighbourhood-level activism include community members being unaware about actions taking place or how to become involved. For example, only two focus group participants were aware of a community benefit agreement campaign, and as such, were the only two involved in negotiations. Another key informant mentioned that while there is representation from immigrant tenant representatives at various neighbourhood meetings, the majority do not recognize their right to participate. Several others echoed this sentiment, saying that immigrants may fear challenging the status quo or do not see themselves as advocates.

The procedures and locations of City Council meetings or development consultations can also pose barriers. As one respondent explained, "a lot of times the only form of engagement is if you attend a meeting and if you don't attend then you miss the opportunity to engage" (KI-13). In other cases, there are additional channels (e.g. phone, online polls) yet these often pose language barriers (KI-13). Consultations and City Council meetings provide little opportunity for residents to contribute in their native language (KI-13). Further, the agenda for the City Council Executive Committee meeting, in which residents were able to make deputations on the Woodbine Casino Community Benefit Agreement, was not finalized until the morning of the meeting resulting in some being unable to depute. Similarly, advocates were told that the final debate and decision could come up anytime within a three day window, so individuals could not plan around employment, childcare or other obligations (KI-12, KI-13). Further City Hall, is 1.5 hours from Rexdale via transit, which hinders engagement (KI-12, KI-13) along with lack of access to a car, or inability to afford transit (FGI-9, KI-5, KI-10).

One key informant suggested those organizing consultations need to be more proactive about inclusion, "I think that process needs to be more of a focus on how do we go out to engage rather than waiting for people to come and provide feedback" (KI-13). Similarly, another informant cited their concerns about the lack of consultation of immigrant residents in regard to incoming light rail transit:

Things are being approved prior to consulting with residents, yet it says they have consulted with residents. Maybe they have, but what type of residents? Or is it just one or two individuals who may not live there? (KI-15)

Several key informants noted their organization was not consulted about light rail transit or other new developments, and as such, their clients were less likely to be involved.

Multiple immigrant residents and service agencies stated that the ability of community members to shape their own environment and advocate for affordability is often overshadowed by decision-makers, developers, prospective buyers and other special interest groups (FG2-1, FG2-8, KI-7, KI-12, KI-13, KI-15). For example, while some Rexdale residents may have some influence over what types of community benefits are received as a result of the casino being built, they have little control over whether or not that development is permitted in the first place. These decisions are highly influenced by developers, politicians and residents with powerful networks and the resources to heavily lobby and gain access to information (KI-7; KI-12).

A common observation amongst key informants closely engaged in neighbourhood-level activism was the fact that while there are immigrant leaders and advocates in Rexdale (KI-1, KI-8, KI-13, KI-11, KI-15), there is often insufficient support of their work or a sense of broken trust due to years of unanswered concerns (KI-12, KI-13, KI-15). One key informant explained, "a lot of people feel like they shouldn't be engaged politically because they feel they've been neglected for so long...Finding champions was not a challenge for us...they were already there. It was our work to actually bring them back, kind of resurrect that strategy and hone in on where our efforts needed to be" (KI-13).

The importance of the local North Etobicoke Resident Council established under the Toronto Strong Neighbourhood Strategy was identified repeatedly due to the platform it

provides to be more influential upon powerful interests. As one informant explained the residents council "is about engaging residents to be able to come together to share a platform for recognizing themselves as communities of common bond...who have a voice in key decision making" (KI-11).

Working with immigrant residents, The Toronto Strong Neighbourhoods Strategy and the City's Tower Renewal initiative have produced a number of building and neighbourhood improvements. Examples include converting a unit in a high-rise tower into a store that provides access to fresh produce and culturally appropriate food, creating a space for neighbourhood meetings equipped with a kitchen and audio-visual technology, creating a sewing repair hub so immigrant women can sew and repair their own clothes or make extra money, in addition to community gardens, murals and playgrounds. These initiatives connect building-level improvements to wider neighbourhood revitalization (KI-14).

Yet, initiatives at the neighbourhood scale are not successfully including all community members, particularly those newest to the country, those unable to speak English, or facing other challenges like domestic violence or oppression. Reaching these groups requires additional resources and dedicated capacity. For example, one key informant noted that their organizing effort could have been more inclusive if they had funds for translators. While community members often act as translators, their capacity is limited and they are typically not paid for their efforts (KI-13).

Representatives from settlement agencies expressed the desire to serve as a bridge between newcomer populations and broader collective action initiatives to increase involvement among vulnerable groups. Several spoke about how education and practice are' required for immigrants to feel comfortable deputing or advocating for change. Some social service agencies have collaborated to support clients in acquiring the tools to self-advocate and/or organize, yet this is a challenge because these organizations do not have dedicated funds or staff for these activities (KI-1, KI-2, KI-8, KI-15), and face concerns about having government funding jeopardized if they are perceived as engaging in political activity (KI-6).

3.5 Discussion and conclusions

Environmental justice as a concept prioritizes revealing environmental risks or deprivations that are disproportionately experienced due to race, ethnicity, immigration, and/or socio-economic status (Schlosberg, 2007). An environmental justice agenda should not only involve documenting inequitable distributions of risks and associated impacts, but strengthen understandings of "procedural injustices", or the ways in which unjust conditions are created and reinforced (Masuda and Crabtree 2010).

Our study responds to calls to examine the social and political processes that contribute to unjust environmental patterns including the role of exclusion, underrepresentation and/or dismissal in policy, action and decision-making (Schlosberg 2007, Walker 2009; Pearsall and Pierce 2010). Smith and Ley (2008) argue that understanding immigrant experiences requires attention to the range of geographical scales that affect their daily lives. We reveal how certain immigrant populations are afflicted by numerous, cumulative barriers that can undermine their ability to influence and/or engage in processes that shape living environments at multiple intersecting scales (i.e. housing unit, high-rise building, neighbourhood). Our findings also illuminate how immigrant populations are attempting to overcome these barriers, in addition to opportunities for strengthening immigrant engagement, power and influence.

Our qualitative approach complements insights from quantitative, multilevel models that aim to uncover the interactive and scaled nature of housing and neighbourhood environments and their collective impact on health (Jones-Rounds, Evans and Braubach 2014). We shed in-depth light on the lived experiences of immigrant populations as they attempt to improve indoor housing and/or outdoor neighbourhood conditions. Further, we suggest a procedural environmental justice lens is helpful in integrating or traversing insights from housing and neighbourhood studies that have generally examined environmental inequalities in scale-specific, independent fashions (Jones-Rounds, Evans and Braubach 2014).

To date, indoor living conditions and associated impacts studied at the housing level have typically not been framed in "environmental justice" terms by researchers, with a few exceptions involving studies on indoor lead exposures (Kraft and Scheberle 1995), cumulative exposures (e.g. over-crowding and noise) (Evans and Marcynyszyn 2004), and landlord influence over housing quality (Grineski and Hernández, 2010). This is somewhat surprising

given evidence of disparities in housing quality (Dunn and Hayes 2000; Friedman and Rosenbaum 2004) and with recent immigrants, visible minorities and refugees documented among the most housing deprived (Friedman and Rosenbaum 2004; Hiebert 2010; Ghosh 2014; Paradis, Wilson and Logan 2014).

Interestingly, when inequitable outdoor conditions are examined at the neighbourhood scale, there has seemingly been a greater propensity to adopt an environmental justice analytical lens (Grineski and Hernández 2010; Adamkiewicz 2011). Grineski and Hernández (2010) propose that the hesitancy to do so at the housing scale may be due to the false presumption that indoor, private living environments are a reflection of individual choices, rather than systemic injustices. Our findings support their work and others that argue immigrants and other marginalized groups do indeed face unique systemic procedural barriers, prejudices and challenges that can reduce one's influence and/or engagement in actions that may lead towards improved conditions (e.g. fear of eviction and deportation, language barriers, poor awareness about tenant and/or civic rights, trauma, problematic power dynamics involving landlords or property managers, etc.) (Grineski and Hernández 2010; Teixeira 2014; van der Poorten and Miller 2017; Chisholm, Howden-Chapman and Fougere 2018).

Our findings uniquely emphasize how barriers to improving conditions at the housing-unit and building-level are nested within additional barriers that constrain immigrant residents' power over environmental conditions at the neighbourhood scale. For example, fear, language challenges and poor landlord relationships are nested within neighbourhood-level barriers including inaccessible City Council meetings or development consultations, a lack of confidence and/or recognition of "the right" to participate in decision-making processes, and/or unequal power compared to other interests (e.g. property and economic developers, investors, etc.). Smith and Ley (2008) argue that paying attention to the range of geographical scales that collectively shape immigrants' daily lives is essential. In their examination of the multi-scalar construction and experience of immigrant poverty and social exclusion in Toronto and Vancouver, they conclude that when disadvantage is compounded at several scales, newcomers' inclusion and engagement can become further diminished (2008).

In our study, certain procedural barriers appeared to be unique to a particular scale (e.g. landlord relations, knowledge of tenants' rights), while others persisted across scales. Fear of eviction or deportation, and language barriers were reported as preventing immigrants from successfully influencing environmental living conditions at housing, building and neighbourhood scales.

Our findings suggest a number of strategies for overcoming barriers. These include facilitating the ability to depute or file grievances in any language (both orally and in writing), providing more convenient times and locations for City Council meetings and development consultations, providing ample advance notice so residents can ensure their attendance, meeting spaces that are safe from retribution from landlords or property owners, and subsidized transportation for low-income residents attending meetings located further away. This is in line with previous studies (Ferilli et al. 2016; Kondo 2012; Nugent 2017).

Our study also advances current knowledge through identifying opportunities for cultivating justice, instead of merely focusing on problems or injustices. This is essential for countering prevailing stigmatizing narratives or stereotypes about low-income, visible minority neighbourhoods (Bauder 2002). Smith and Ley (2008) speak to the importance of avoiding the reproduction of popular "essentializations" of impoverished immigrant neighbourhoods where residents appear only as powerless, dis-invested victims, at the expense of acknowledging the determination and resilience exhibited by many in the face of challenging environments and systemic constraints. They go on to say that we must pay attention to "neighbourhoods of hope that go against the grain of major findings, an emphasis rarely noted in the comparative literature" (p. 709). To date limited attention has been given to examples of immigrant leadership and successful self-organization or influence within advocacy processes for improved living conditions (Nugent 2017; Theodore and Martin 2007).

Our study provides examples of successful initiatives unfolding at both building-level and neighbourhood-levels. Examples at the building-level include active tenants' associations, advocacy against above-guideline rent increases, filing joint complaints to secure building-wide maintenance repairs, and resident involvement in the City's Tower Renewal project. At the neighbourhood-level, positive initiatives included securing safer sidewalks and bike lanes, and

community benefit agreements with a Casino Developer, including funding for a childcare center, local and diverse employment and procurement, and apprenticeship opportunities.

Despite these success stories, the voices of community leaders have also been ignored, and when their views are solicited there is insufficient follow-up. There is a limit to community influence due to the nature of consultations and the disproportionate power held by developers, elected officials, property owners and lobbyists (Beard and Sarmiento 2014; Einstein, Palmer and Glick 2018). Processes and initiatives should more frequently center the voices of community members by prioritizing the changes they would like to see in their communities. This is particularly urgent as gentrification and displacement pressures increase, and due to the exclusion of historically marginalized communities from urban governance and land-use planning decisions (Masuda, Poland and Baxter 2010; Masuda et al. 2012; Pellow 2017).

Various resources and institutional supports must be in place to overcome procedural injustices facing the most vulnerable immigrant sub-populations (e.g., recent arrivals, individuals without legal status, victims of trauma and domestic abuse) so that they can meaningfully engage in existing processes shaping environmental living conditions. Enhancing the accessibility and inclusiveness of advocacy and engagement initiatives requires support from trusted service agencies that can provide education on tenants' rights and existing building or neighbourhood-level initiatives, in addition to verbal and written translation services, assistance with navigating legal and institutional systems, public speaking or advocacy training, and safe spaces to gather without fear of retribution. Providing this necessary support requires additional funding for social service agencies and greater flexibility from funders with respect to permissible mandates.

We acknowledge our sample and conclusions are not representative of all experiences of immigrants attempting to remedy their environmental living conditions, and encourage further exploration of procedural environmental (in)justices in relation to the lived experiences of immigrants and other marginalized populations in various contexts to further assess the transferability of our findings.

While inequitable housing and neighbourhood conditions are in and of themselves an environmental injustice, so too are the procedural barriers that deter or inhibit individuals from making improvements to their environments. Despite being faced with a suite of cumulative constraints, racialized, immigrant communities are attempting to make changes to their living environments at a variety of scales.

4. CHAPTER FOUR: CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

4.1 Conclusions and Policy Implications

This research documented not only the lived experience of immigrants and newcomers residing in substandard housing and neighbourhood environments, but experiences in attempting to improve those conditions as well as related opportunities and constraints. Through key informant interviews with individuals familiar with environmental living conditions that also support immigrants in various capacities, and focus groups with immigrants and newcomers, new insights into these experiences were gained. In an effort to document the environmental living conditions of immigrants and newcomers in Rexdale across multiple scales, we found that multiple hazards and unhealthy conditions often exist at once. For example, a family may be coping with pests such as roaches, as well as plumbing issues in their individual unit. At the building level, they may also experience non-functioning elevators or lack of community space, and at the neighbourhood level, there may be inadequate transit or opportunities for employment. Each of these factors, paired with other experiences of trauma, discrimination or abuse, can impact an individual's health and wellbeing, as well as community dynamics. Substandard conditions may create a pervasive stigma, further reducing education quality, job opportunities, and investment. Affordability causes added stress, as well as problematic coping mechanisms such as living with other families or friends in crowded conditions, couch surfing, shelter hopping, staying in motels or returning to an abusive partner. New development in the neighbourhood is now also bringing new fears of gentrification alongside these existing impacts on health, wellbeing and community.

Our findings indicate that there is an urgent need for improved conditions at multiple scales, and as such, there should be more investment to improve the conditions within units, buildings and in the broader neighbourhood. As many of the conditions within units do not meet housing standards, the City of Toronto should implement audits of high-rise buildings in order to establish conditions and require landlords to bring conditions up to code. In other countries where this approach has been used, it was successful in improving housing conditions (Chisholm, Howden-Chapman and Fougere 2017). Further, there should be more monitoring of rent prices to ensure that limits to annual rent increases are followed by landlords. To address

an already existing housing crisis and protect against displacement pressures that may stem from new developments or neighbourhood improvement initiatives, existing affordable housing should be protected and increases in affordable housing are needed (Wolch, Bryne and Newell 2014; Sandoval 2018; Curran and Hamilton 2019). At the same time, approaches to environmental improvements that ensure community is meaningfully involved in rehabilitation projects in ways that minimize displacement or exclusion should be considered (Sandoval 2018; Curran and Hamilton 2019 p. 1039).

Environmental justice issues in the Rexdale community are not limited to conditions and impacts, but also include procedural and systemic obstacles that constrain individuals and community groups' ability to improve their environments. As noted within other studies, immigrant, low income, and racialized communities are often excluded from decision-making processes that shape the spaces in which they live (Masuda, Poland and Baxter 2010; Grineski and Hernández 2010; Masuda et al. 2012; Pellow 2017). Despite structural and procedural obstacles, individuals, tenant groups and community councils have had success in making positive changes to their environments and in securing Community Benefit Agreements, and these stories and best practices need to be recognized and celebrated to facilitate hope and counter stigma. Our findings reveal that existing procedures for City Council meetings and community consultations are not inclusive, and that fear, lack of knowledge of tenants' rights, unresponsive landlords, language barriers, competing needs and lack of time or ability to access services, are some of the factors that can limit one's ability to improve environmental conditions. Immigrants and newcomers, particularly the most vulnerable, require support from social service agencies to self-advocate, and social service agencies and community organizers require more funding, staffing and flexible mandates to assist community members in gaining the skills and capacities required to influence changes to their environment that they would like to see.

4.2 Limitations and recommendations for future research

Limitations for this study included the small and non-random sample of key informants and focus group participants. As a result, findings may not be easily transferable to other geographic locations or communities. However, our method of recruitment and data collection

allowed for trust to be built, increasing our confidence that participants felt comfortable sharing their real lived experience and that key informants' work was closely related with the themes of our research. Future research should carry out cross-sectional and comparative case studies in different neighbourhoods in Toronto, or across Canada, in an attempt to discover which environmental justice issues related to living conditions persist across multiple locations and socio-demographic variables such as ethnicity, socio-economic, and/or immigration status. Further, cities with different procedures for Council meetings, housing management, Community Benefit Agreements or community consultations may have reduced or different procedural issues and barriers to participation and influence that are worth deeper exploration.

An additional factor that may have influenced our results was the fact that we recruited through community partners. Given our study participants were directly engaged with and/or familiar with the Rexdale Community Hub, local settlement agencies, and/or local residents' councils it is likely that our sample did not include the most vulnerable groups who have little to no access to these networks and support services. Key informants were able to shed some light on the lived experience of some members of these groups (e.g., undocumented immigrants, individuals with mental health issues, those facing domestic violence and/or transient homelessness) during their interviews. Nevertheless, efforts should continue to be made to discover ways to ethically and meaningfully engage more directly with these populations.

Both focus groups were diverse, with a mix of genders, countries of origin, and duration of time within Canada reflected. While we did not observe any overt marginalization, unequal power dynamics, or an unwillingness to participate within either group, group dynamics can influence participation and, as a result, research themes (Farnsworth and Boon 2010). Future research designs with a higher number of focus groups, focus groups with participants divided based on important variables such as income, ethnicity, specific buildings, etc., along with an opportunity for an individual survey, could help to triangulate data and increase its reliability and generalizability. Further, while we collected some of this information about our participants (e.g. whether they lived in public or private rental housing, income, how long they have been in Canada, etc.) given the dynamics of a focus group where people are sometimes talking over one another at times it was challenging to determine on the audio recording with

absolute certainty which quotes or insights were provided by which individual who possessed these various traits. Further, with a small sample it is important to be sensitive to confidentiality concerns. We provided this important context in our findings to the best of our ability where appropriate, yet future research could attempt to tease out these important differences in lived experience more thoroughly.

Another limitation is the lack of key informant interviews with private landlords, or with Toronto Community Housing, which oversees public housing in Toronto. Developers and elected officials were not interviewed either. While we did reach out to several of these stakeholders without success, there is value on focusing on the lived experiences immigrants and newcomers have with high-rise housing and the environment that surrounds it and the social service agencies seen generally as partners in improving conditions. Such voices are often underrepresented, while those traditionally in power often receive more coverage and weight in mainstream media (Deacon, Baxter and Buzzelli 2015). However, additional research critically examining the role of public and private landlords, elected officials, and developers in maintaining substandard housing conditions, could aid in better understanding the intersections of procedural environmental justice and housing.

Several key informants also noted that there are many informal community leaders or peer advocates that understand the range of justice and equity issues facing their fellow community members, as well as the resources and changes that would best benefit their community, including the most marginalized. Yet, these individuals are often unable to meaningfully sustain this work over time, without support and compensation. This presents an opportunity for researchers and local governments to engage with immigrants and newcomers, or other populations encountering environmental injustices pertaining to their housing, building and neighbourhood conditions, in equity-focused, community based participatory research. Community based participatory research aims to not only document, but to circumvent unjust and oppressive systems through the research project (Masuda, Poland and Baxter 2010). For example, a recent partnership of researchers at the Canadian Partnership for Children's Health and Environment and local tenant advocates engaged in equity-focused knowledge translation to uncover biases and blind spots health experts (e.g. researchers and

policymakers) might have and to address areas where and how improvements could be made (Phipps and Masuda 2018). Equity focused practice in the pursuit of reducing and reversing environmental injustices, requires a structured approach that effectively supports and values the contributions of those with lived experience in organising for change (Masuda, Poland and Baxter 2010). Community based participatory research also creates an opportunity to utilize strategies for change-making that have been successful in the past, as well as new strategies, and to document why certain approaches are unsuccessful in improving living environments.

REFERENCES

- Adamkiewicz, Gary, Ami R. Zota, M. Patricia Fabian, Teresa Chahine, Rhona Julien, John D. Spengler, and Jonathan I. Levy. 2011. "Moving Environmental Justice Indoors: Understanding Structural Influences on Residential Exposure Patterns in Low-Income Communities." *American Journal of Public Health* (12): S238-S245
- Amar, Amardeep Kaur and Cheryl Teelucksingh. 2015. "Environmental Justice, Transit Equity and the Place for Immigrants in Toronto." *Canadian Journal of Urban Research* 24 (2): 43-63.
- Anguelovski, Isabelle. 2015. "Healthy Food Stores, Greenlining and Food Gentrification: Contesting

 New Forms of Privilege, Displacement and Locally Unwanted Land Uses in Racially Mixed

 Neighborhoods: Health Food Stores, Greenlining and Food Gentrification." International Journal
 of Urban and Regional Research 39 (6): 1209-1230. doi:10.1111/1468-2427.12299
- Baker, Emma, Andrew Beer, Laurence Lester, David Pevalin, Christine Whitehead, and Rebecca Bentley.

 2017. "Is Housing a Health Insult?" *International Journal of Environmental Research and Public Health* 14 (6): 567. doi:10.3390/ijerph14060567
- Bauder, Harald. 2002. "Neighborhood Effects and Cultural Exclusion". *Urban Studies* 39: 85–93. doi:10.1080/00420980220099087
- Beard, Victoria A. and Carolina S. Sarmiento. 2014. "Planning, Public Participation, and Money Politics in Santa Ana (CA)." *Journal of the American Planning Association* 80 (2): 168-181.
- Bryant, Toba, Dennis Raphael and Robb Travers. 2007. "Identifying and Strengthening the Structural Roots of Urban Health in Canada: Participatory Policy Research and the Urban Health Agenda."

 Promotion and Education 14 (1) 6-11.
- Bryman, Alan, Edward A. Bell, and James J. Teevan. 2012. *Social Research Methods.* Third Canadian ed. Oxford University Press.
- Buckingham, Susan and Rakibe Kulcur 2010. "Gendered Geographies of Environmental Justice."

 In Spaces of Environmental Justice, edited by Ryan Holifield, Michael Porter, and Gordon Walker, 70–94. New York: Wiley-Blackwell.
- City of Toronto. 2014. *TSNS 2020 Neighbourhood Equity Index: Methodological Documentation.*Toronto: Social Policy Analysis and Research.

- City of Toronto. 2019. "Neighbourhood Profiles." Accessed November 1, 2017.

 https://www.toronto.ca/city-government/data-research-maps/neighbourhoodscommunities/neighbourhood-profiles/.
- Chambers, Earle C., Margaret S. Pichardo, and Emily Rosenbaum. 2016. "Sleep and the Housing and Neighborhood Environment of Urban Latino Adults Living in Low-Income Housing: The AHOME Study." *Behavioral Sleep Medicine* 14 (2): 169-184. doi:10.1080/15402002.2014.974180
- Chapple, Karen, Paul Waddell, Daniel Chatman, Miriam Zuk, Anastasia Loukaitou-Sideris and Paul Ong.

 2017. "Developing a New Methodology for Analyzing Potential Displacement." University of
 California.
- Chisholm, Elinor, Philipa Howden-Chapman, and Geoff Fougere. 2018. "Tenants' Responses to Substandard Housing: Hidden and Invisible Power and the Failure of Rental Housing Regulation." *Housing, Theory and Society*: 1-23.
- Conway, Brian P., and David S. Hachen. 2005. "Attachments, Grievances, Resources, and Efficacy: The Determinants of Tenant Association Participation Among Public Housing Tenants." *Journal of Urban Affairs* 27 (1): 25-52. doi:10.1111/j.0735-2166.2005.00223.x
- Coulton, Claudia J., Jill Korbin, Tsui Chan, and Marilyn Su. 2001. "Mapping Residents' Perceptions of Neighborhood Boundaries: A Methodological Note". *American Journal of Community Psychology* 29 (2): 371–383.
- Crabtree, Benjamin F. and William L. Miller. 1999. *Doing Qualitative Research*. California: SAGE Publications.
- Curtis, Lori J., and William J. MacMinn. 2008. "Health Care Utilization in Canada: Twenty-five Years of Evidence." *Canadian Public Policy / Analyse De Politiques* 34 (1) 65-87.
- Dahmann, Nicholas M., and Becky Dennison. 2013. "Organizing for Healthy Communities: A Report from Public Housing in Los Angeles." Progress in Community Health Partnerships: *Research, Education, and Action* 7 (1): 77-82. doi:10.1353/cpr.2013.0007
- Dannenberg, Andrew L., Howard Frumkin, and Richard J. Jackson. 2011. *Making Healthy Places:*Designing and Building for Health, Well-being, and Sustainability. Center for Resource

 Economics: Island Press.

- Deacon, Leith, Jamie Baxter, and Michael Buzzelli. 2015. "Environmental Justice: An Exploratory

 Snapshot through the Lens of Canada's Mainstream News Media: Environmental Justice." The

 Canadian Geographer / Le Géographe Canadien 59 (4): 419-432. doi:10.1111/cag.12223
- Dunn, James R. and Michael V. Hayes. 2000. "Social Inequality, Population Health, and Housing: A Study of Two Vancouver Neighborhoods." *Social Science & Medicine* 51 (4): 563-587.
- Dunn, J. R., Frohlich, Katherine L., Ross, Nancy. A., Curtis, Lori. J., and Sanmartin, Claudia. 2005. "Role of Geography in Inequalities in Health and Human Development." In *From Analysis to Action*, edited by Jody Heyman, Clyde Hertzman, Morris L. Barer, and Robert G. Evans, 554–598. New York: Oxford University Press.
- Einstein, Katherine Levine, Maxwell Palmer, and David M. Glick. 2019. "Who Participates in Local Government? Evidence from Meeting Minutes." *Perspectives on Politics* 17 (1): 28-46.
- Evans, Gary W. and Marcynyszyn, Lyscha A. (2004). "Environmental Justice, Cumulative Environmental Risk and Health Among low and Middle-Income Children in Upstate New York." *American Journal of Public Health.* 94 (11): 1942-44.
- Farnsworth, John and Bronwyn Boon. 2010. "Analysing Group Dynamics Within the Focus Group."

 Qualitative Research 10 (5) 605-624.
- FCJ Refugee Centre. 2019. Welcome Home, Which Home? Just a Place to Sleep?: Welcoming Refuge

 Claimants and Precarious Migrants to the City of Toronto. Toronto: Maytree.
- Ferilli, Guido, Pier L. Sacco, and Giorgio Tavano Blessi. 2016. "Beyond the Rhetoric of Participation:

 New Challenges and Prospects for Inclusive Urban Regeneration." *City, Culture and Society* 7(2): 95-100.
- Firang, David. 2019. "Exploring Housing Careers among Ghanaians in Toronto, Canada." *Housing Studies* 34 (5): 868-891. doi:10.1080/02673037.2018.1489527
- Foy, Kevin C. 2012. "Home is Where the Health is: The Convergence of Environmental Justice, Affordable Housing and Green Building." *Pace Environmental Law Review* 30 (1).
- Frank, Lawrence D., Peter O. Engelke, and Thomas L. Schmid. 2003. *Health and Community Design: The Impact of the Built Environment on Physical Activity*. Island Press.

- Friedman, Samantha and Emily Rosenbaum. 2004. "Nativity Status and racial/ethnic Differences in Access to Quality Housing: Does Homeownership Bring Greater Parity?" *Housing Policy Debate* 15 (4): 865-901.
- Ghosh, Sutama. 2014. "Everyday Lives in Vertical Neighbourhoods: Exploring Bangladeshi Residential Spaces in Toronto's Inner Suburbs." International Journal of Urban and Regional Research 38 (6): 2008-2024. doi:10.1111/1468-2427.12170
- Ghosh, Sutama, Ann Marie Murnaghan, Sara Edge, Emily Brown and Nicholas Pulsone. 2018. "Rexdale Then and Now." Presentation, Rexdale, ON, October, 19 2018.
- Government of Ontario. 2016. A New Direction: Ontario's Immigration Strategy 2016 Progress Report.

 Ontario: Queen's Printer for Ontario.
- Gould, Kenneth A. and Tammy L. Lewis. 2018. "From Green Gentrification to Resilience Gentrification:

 An Example from Brooklyn." *City & Community* 17 (1): 12. doi:10.1111/cico.12283
- Gravlee, Clarence. 2009. "How Race Becomes Biology: Embodiment of Social Inequality." *American Journal of Physical Anthropology.* 131 (1): 47-57. doi:10.1002/ajpa.20983
- Grineski, Sara. 2008. "Childhood Asthma, Public Housing, and Environmental Control: Differences between Families Renting with Section 8 Vouchers and those Living in the Projects." *Journal of Poverty* 12 (4): 432-455. doi:10.1080/10875540802350120
- Grineski, Sara E., and Alma Angelica Hernández. 2010. "Landlords, Fear, and Children's Respiratory

 Health: An Untold Story of Environmental Injustice in the Central City." *Local Environment* 15

 (3): 199-216. doi:10.1080/13549830903575562
- Haberle, Megan. 2017. "Fair Housing and Environmental Justice: New Strategies and Challenges."

 Journal of Affordable Housing & Community Development Law 26 (2): 271-279.
- Haluza-Delay, Randolph. 2007. "Environmental Justice in Canada." *Local Environment* 12 (6): 557-564.doi:10.1080/13549830701657323Harwood, Stacy, and Dowell Myers. 2002. "The Dynamics of Immigration and Local Governance

In Santa Ana. Neighborhood Activism, Overcrowding, and Land-use Policy." Policy Studies

Journal 30 (1): 70-91. doi:10.1111/j.1541-0072.2002.tb02130.x

- Harris, Neil, Fiona Rowe Minniss, and Shawn Somerset. 2014. "Refugees Connecting with a New Country through Community Food Gardening." International Journal of Environmental Research and Public Health 11 (9): 9202-9216.
- Hiebert, Daniel. 2010. "Newcomers in the Canadian Housing Market." Canadian Issues 8-15.
- Hipp, John R. and Cynthia M. Lakon. 2010. "Social Disparities in Health: Disproportionate Toxicity Proximity in Minority Communities Over a Decade." *Health and Place* 16 (4): 674-683.
- Hordyk, Shawn Renee, Jill Hanley, and Éric Richard. 2015. "'Nature is there; It's Free': Urban

 Greenspace and the Social Determinants of Health of Immigrant Families." *Health and Place* 34:
 74-82. doi:10.1016/j.healthplace.2015.03.016
- Hulchanski, J. David. 2010. *The Three Cities Within Toronto: Income polarization Among Toronto's Neighbourhoods, 1970-2005*. Toronto: Cities Centre, University of Toronto.
- Hulchanski, J. David. 2019. "Segregation Trends in Toronto." Lecture, Ryerson University, Centre for Immigration and Settlement, Toronto, February 14, 2019.
- Jones-Rounds, McKenzie L., Gary W. Evans, and Matthias Braubach. 2014. "The Interactive Effects of Housing and Neighbourhood Quality on Psychological Well-being." *Journal of Epidemiology and Community Health* 68 (2): 171-175.
- Jackson, Richard J. 2003. "The Impact of the Built Environment on Health: An Emerging Field."

 American Journal of Public Health 93 (9): 1382-1384. doi:10.2105/AJPH.93.9.1382
- Kidd, Pamela S. and Mark B. Parshall. 2000. "Getting the Focus and the Group: Enhancing Analytical Rigor in Focus Group Research." *Qualitative Health Research* 10 (3): 293-308. doi:10.1177/104973200129118453
- Kern, Leslie and Caroline Kovesi. 2018. "Environmental Justice Meets the Right to Stay Put: Mobilising

 Against Environmental Racism, Gentrification, and Xenophobia in Chicago's Little Village." *Local Environment* 23 (9): 952-966. doi:10.1080/13549839.2018.1508204
- Kondo, Michelle C. 2012. "Immigrant Organizations in Pursuit of Inclusive Planning: Lessons from a Municipal Annexation Case." *Journal of Planning Education and Research* 32(3): 319-330. doi:10.1177/0739456X
- Kraft, Michael E. and Denise Scheberle. 1995. "Environmental Justice and the Allocation of Risk: The Case of Lead and Public Health." *The Policy Studies Journal* 23 (1): 113-122.

- Krieger, Nancy. 2016. Embodying Inequality: Epidemiological Perspectives. New York: Routledge.
- Litt, Jill S., Cynthia Goss, Lihong Diao, Amanda Allshouse, Sandra Diaz-Castillo, Robert A. Bardwell, Edward Hendrikson, Shelly L. Miller, and Carolyn DiGuiseppi. 2010. "Housing Environments and Child Health Conditions among Recent Mexican Immigrant Families: A Population-Based Study."

 Journal of Immigrant and Minority Health 12 (5): 617-625.
- Lejeune, Zoé, Guillaume Xhignesse, Marko Kryvobokov, and Jacques Teller. 2016. "Housing Quality as Environmental Inequality: The Case of Wallonia, Belgium." Journal of Housing and the Built Environment 31 (3): 495-512. doi:10.1007/s10901-015-9470-5
- Logan, Jennifer and Robert Murdie. 2016. "Home in Canada? the Settlement Experiences of Tibetans in Parkdale, Toronto." *Journal of International Migration and Integration* 17 (1): 95-113. doi:10.1007/s12134-014-0382-0
- Mahamoud, Aziza, Brenda Roche, Bob Gardner and Michael Shappcott. 2012. *Housing and Health: Examining the Links*. Toronto: Wellesley Institute.
- Masuda, Jeffrey R. and Alexis Crabtree. 2010. "Environmental Justice in the Therapeutic Inner City." *Health and Place* 16 (4): 656-665.
- Masuda, Jeffrey. R., Blake Poland, and Jamie Baxter. 2010. "Reaching for Environmental Health Justice:

 Canadian Experiences for a Comprehensive Research, Policy and Advocacy Agenda in Health

 Promotion." Health Promotion International 25(4), 453-463.
- Masuda, Jeffrey R., Cheryl Teelucksingh, Tara Zupancic, Alexis Crabtree, Rebecca Haber, Emily Skinner,
 Blake Poland, Jim Frankish, and Mara Fridell. 2012. "Out of Our Inner City Backyards: Re-Scaling
 Urban Environmental Health Inequity Assessment." *Social Science & Medicine* 75 (7): 12441253. doi:10.1016/j.socscimed.2012.04.034
- Masuda, Jeffery R., Tara Zupancic, Blake Poland, and Donald C. Cole. 2008. "Environmental Health and Vulnerable Populations in Canada: Mapping an Integrated Equity-Focused Research Agenda."

 The Canadian Geographer 52 (4): 427-450. doi:10.1111/j.1541-0064.2008.00223.x
- Matte, Thomas D., and David E. Jacobs. 2000. "Housing and Health: Current Issues and Implications for Research and Programs." *Journal of Urban Health* 77 (1): 7-25.
- McCarthy, P., D. Byrne, S. Harrison, and J. Keithley. 1985. "Housing Type, Housing Location and Mental Health." *Social Psychiatry* 20 (3): 125-130.

- McClintock, Nathan. 2014. "Radical, Reformist, and Garden-Variety Neoliberal: Coming to Terms with Urban Agriculture's Contradictions." *Local Environment* 19 (2): 147-171. doi:10.1080/13549839.2012.752797
- Mensah, Joseph and Christopher J. Williams. 2012. "Cultural Dimensions of African Immigrant Housing in Toronto: A Qualitative Insight." *Housing Studies* 29 (8), 438-455.
- Mohai, Paul, David Pellow, and J. Timmons Roberts. 2009. "Environmental Justice." *Annual Review of Environment and Resources* 34 (1): 405-430.
- Murdie, Robert. 2010. "Precarious Beginnings: The Housing Situation of Canada's Refugees." *Canadian Issues*: 47.
- Murdie, Robert A., Jennifer Logan, and Richard Maaranen. 2013. *Eight Canadian Metropolitan Areas:*Who Lived Where in 2006? Toronto: Cities Centre, University of Toronto.
- Newbold, Bruce K. 2006. "Chronic Conditions and the Healthy Immigrant Effect: Evidence From Canadian Immigrants." *Journal of Ethnic and Migration Studies* 32(5): 765-784. doi:10.1080/13691830600704149
- Ng, Edward, Russell Wilkins, François Gendron and Jean-Marie Berthelot. 2005. *Dynamics of Immigrants' Health in Canada: Evidence from the National Population Health Survey.* Ottawa: Statistics Canada.
- Nugent, James. 2017. "The Right to Build the City: Can Community Benefits Agreements Bring Employment Equity to the Construction Sector?" *Labour / Le Travail* 80: 81-114. doi:10.1353/llt.2017.0044
- Oudin, Anna, Jens C. Richter, Tahir Taj, Lina Al-nahar, and Kristina Jakobsson. 2016. "Poor Housing Conditions in Association with Child Health in a Disadvantaged Immigrant Population: A Cross-Sectional Study in Rosengård, Malmö, Sweden." *BMJ Open* 6 (1): e007979-e007979.
- Paradis, Emily, Ruth Marie Wilson, and Jennifer Logan. 2011. *Nowhere Else to Go: Inadequate Housing & Risk of Homelessness Among Families in Toronto's Aging Rental Buildings.* Toronto:

 Neighbourhood Change Research Partnership.
- Park, Giyoung, Giyoung Park, and Gary W. Evans. 2016. "Environmental Stressors, Urban Design and Planning: Implications for Human Behaviour and Health." *Journal of Urban Design* 21 (4): 453-470. doi:10.1080/13574809.2016.1194189

- Pearsall, Hamil, and Joseph Pierce. 2010. "Urban Sustainability and Environmental Justice: Evaluating the Linkages in Public Planning/Policy Discourse." *Local Environment* 15 (6): 569-80. doi:10.1080/13549839.2010.487528
- Pellow, David N. 2016. "Toward A Critical Environmental Justice Studies: Black Lives Matter as an Environmental Justice Challenge." *Du Bois Review: Social Science Research on Race* 13 (2): 221-236. doi:10.1017/S1742058X1600014X
- Pellow, David Naguib. 2017. What is Critical Environmental Justice? Cambridge: Polity Press.
- Phipps, Erica and Jeffrey R. Masuda. 2018. "Towards Equity-Focused Intersectoral Practice (EquIP) in Children's Environmental Health and Housing: The Transformational Story of RentSafe."

 Canadian Journal of Public Health 109 (3): 379-385. doi:10.17269/s41997-018-0094-x
- Poppe, Will, and Douglas Young. 2015. "The Politics of Place: Place-making Versus Densification in Toronto's Tower Neighbourhoods." *International Journal of Urban and Regional Research* 39 (3): 613-21. doi:10.1111/1468-2427.12196
- Rauh, Virginia A., Philip J. Landrigan, and Luz Claudio. 2008. "Housing and Health: Intersection of Poverty and Environmental Exposures." *Annals of the New York Academy of Sciences* 1136 (1): 276-288. doi:10.1196/annals.1425.032
- Renalds, Arlene, Tracey H. Smith, and Patty J. Hale. 2010. "A Systematic Review of Built Environment and Health." *Family and Community Health* 33 (1): 68-78. doi:10.1097/FCH.0b013e3181c4e2e5
- Rentsafe. 2015. *Background Paper on Housing-Related Health Risks*. Canada: Canadian Partnership for Children's Health and Environment.
- Rosenbaum, Emily. 2008. "Racial/Ethnic Differences in Asthma Prevalence: The Role of Housing and Neighborhood Environments." *Journal of Health and Social Behavior* 49 (2): 131-145. doi:10.1177/002214650804900202
- Sandoval, Gerardo Francisco. 2018. "Planning the Barrio: Ethnic Identity and Struggles Over Transit-Oriented, Development-Induced Gentrification." *Journal of Planning Education and Research* 1-15. 739456. doi:10.1177/0739456X18793714
- Schlosberg, David. 2007. *Defining Environmental Justice: Theories, Movements, and Nature.*Oxford: Oxford University Press.

- Smith, Heather. and Ley, David. 2008. "Even in Canada? The Multiscalar Construction and Experience of Concentrated Immigrant Poverty in Gateway Cities. "Annals of the Association of American Geographers, 98(3), 686–713.
- Standish, Katherine, Vijay Nandi, Danielle C. Ompad, Sandra Momper, and Sandro Galea. 2010.

 "Household Density among Undocumented Mexican Immigrants in New York City." *Journal of Immigrant and Minority Health* 12 (3): 310-318. doi:10.1007/s10903-008-9175-x
- Teelucksingh, Cheryl. 2007. "Environmental Racialization: Linking Racialization to the Environment in Canada." Local Environment 12 (6): 645-661. doi:10.1080/13549830701657455
- Teelucksingh, Cheryl, Blake Poland, Chris Buse, and Rebecca Hasdell. 2016. "Environmental Justice in the Environmental Non-Governmental Organization Landscape of Toronto (Canada):

 Environmental Justice in the Toronto ENGO Landscape." *The Canadian Geographer / Le Géographe Canadien* 60 (3): 381-393. doi:10.1111/cag.12278
- Teixeira, Carlos. 2008. "Barriers and Outcomes in the Housing Searches of New Immigrants and Refugees: A Case Study of "Black" Africans in Toronto's Rental Market." *Journal of Housing and the Built Environment* 23 (4): 253-276. doi:10.1007/s10901-008-9118-9
- Teixeira, Carlos. 2014. "Living on the 'Edge of the Suburbs' of Vancouver: A Case Study of the Housing Experiences and Coping Strategies of Recent Immigrants in Surrey and Richmond." *The Canadian Geographer* 58(2), 168-187. doi:10.1111/j.1541-0064.2013.12055.x
- Theodore, Nik, and Nina Martin. 2007. "Migrant Civil Society: New Voices in the Struggle Over Community Development." *Journal of Urban Affairs* 29 (3): 269-287. doi:10.1111/j.1467-9906.2007.00343.x
- Umaña-Taylor, Adriana J. and Mayra Y. Bámaca. 2004. "Conducting Focus Groups with Latino Populations: Lessons from the Field." *Family Relations* 53 (3): 261-272. doi:10.1111/j.0022-2445.2004.0002.x
- United Way. 2004. Poverty by Postal Code: The Geography of Neighbourhood Poverty. Toronto: United Way.
- United Way. 2011. Poverty by Postal Code 2: Vertical Poverty. Toronto: United Way.
- Waldron, Ingrid. 2018. "Re-Thinking Waste: Mapping Racial Geographies of Violence on the Colonial Landscape." Environmental Sociology 4 (1): 36-53. doi:10.1080/23251042.2018.1429178

- Walker, Gordon. 2009. "Beyond Distribution and Proximity: Exploring the Multiple Spatialities of Environmental Justice." *Antipode* 41 (4): 614-636.
- Walks, Alan. 2010. "New Divisions: Social Polarization and Neighbourhood Inequality in the Canadian City", in Bunting, T.E., Filion, P. and Walker, R. *Canadian Cities in Transition: New Directions in the Twenty-First Century,* 170-190. Oxford: Oxford University Press.
- Wang, Lu. 2014. "Immigrant Health, Socioeconomic Factors and Residential Neighbourhood

 Characteristics: A Comparison of Multiple Ethnic Groups in Canada." *Applied Geography* 51: 9098.
- Williams, Allison M., Peter Kitchen, James Randall, Nazeem Muhajarine, Bruce Newbold, Melissa
 Gallina, and Kathi Wilson. 2015. "Immigrants' Perceptions of Quality of Life in Three Second- Or
 Third-Tier Canadian Cities: Immigrants' Perceptions of QOL." *The Canadian Geographer / Le*Géographe Canadien 59 (4): 489-503. doi:10.1111/cag.12221
- Wiseman, C. L. S., A. Parnia, D. Chakravartty, J. Archbold, R. Copes, and D. Cole. 2019. "Total, Methyl and Inorganic Mercury Concentrations in Blood and Environmental Exposure Sources in Newcomer Women in Toronto, Canada." Environmental Research 169: 261-271. doi:10.1016/j.envres.2018.11.011
- van der Poorten, Kylee, and Byron Miller. 2017. Secondary Suites, Second-class Citizens: The History and Geography of Calgary's Most Controversial Housing Policy. *The Canadian Geographer* 61(4): 564-578. doi:10.1111/cag.12425
- Yin, Robert K. 2009. Case Study Research: Design and Methods. Los Angeles: SAGE Publications.