

# Housing, Supports, and Connectivity

The Science of Resilience









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#### Definition

Affordable, habitable, accessible, safe, and culturally appropriate housing is recognized by the UN as a human right (Chambers et al., 2014). However, housing is more complex than just a physical structure or a roof over one's head. 'Housing' is both a noun and a verb. As a noun, housing refers to the physical or material building in which one lives. As a verb, housing refers to the social activities associated with creating material buildings and the work done to inhabit them. Alternatively, 'dwelling' is a word that can be used both as a noun and a verb, but the verb captures the day-to-day activities associated with living and being in a physical space (Ruonavaara, 2018). To better describe housing and its relationship to resilience, it is helpful to describe housing according to its components: the physical structure of the building, what makes a house a 'home,' the physical or ecological features of the surrounding neighbourhood, and the community in which the home is located.

#### **Physical Housing Structures**

The most obvious component of housing is the physical structure. This includes all physical or material aspects of the building, such as its structure and materials (Chambers et al., 2014). When looking at the physical structure, we can look at housing type (single-detached housing, apartments, mobile homes, etc.), building materials (flame resistant or energy efficient materials), indoor space and facilities (windows, appliances, number of rooms and bathrooms, etc.) and more. Housing can facilitate health and wellbeing by providing protection against the elements, a supply of drinkable water, a place to dispose of sanitary and solid wastes, altering air quality, and providing facilities for personal and domestic hygiene (Lawrence & Hartig, 1998).

#### 'Home'

Often when people talk about housing, they refer to the features, people, and experiences that make a house a 'home' (Chambers et al., 2014; Easthope, 2004). What makes a house a home is highly debated and varies depending on who you ask; however, 'home' generally refers to the affective or emotional dimensions of housing. Topophilia is a word used to describe the affective response that people have to places, and no place seems to conjure emotion for us like the home environment (Easthope, 2004). For Doucet (2013), "feeling at home is expressed individually or with a sense of the communal making possible a lifestyle that suggests comfort, peace, belonging, privacy, safety and security, or "where the heart soars."" (p. 247).

Easthope (2004) draws upon place studies to describe the different dimensions associated with defining 'home.' Place studies recognizes places as socially constructed – not just physically, in terms of the construction and design of the place, but also emotionally and cognitively, in the meanings and stories invested in places. Because places are invested with memory and meaning, places play an important role in helping shape and inform our identities.

Some place scholars distinguish between a 'sense of place,' which could be either positive or negative, and 'rootedness,' which implies a sense of belonging and unselfconsciousness. Easthope (2004) describes how the concept of 'home' is highly debated and seen as referring to more than just a place where one lives. Some scholars emphasize the fusion between the physical unit of the house and the social unit of the household, others emphasize how the home comes with a feeling of security and satisfaction, where day-to-day routines are performed. Home is often the place where people tend to have the greatest feelings of control, in part because it is one place where they are free from the surveillance of the outside world. Home is the place of 'greatest personal significance' (Easthope, 2004).

Importantly, because 'home' is socially constructed as well as physically constructed, people undertake a range of activities that make a physical space feel significant to them. When people enter a new space, they redesign, decorate, and make changes to the space to make it more personal for them. However, the extent to which people are able to make spaces 'homey' depends on how much control they have over the space – renters, for instance, tend to have significantly less control over the home environment that homeowners (Easthope, 2014).

Since home is the environment in which people spend most of their time, scholars argue that it plays a significant role in how people see themselves relative to others and, therefore, can have a major impact on mental health and wellbeing (Clark & Kearns, 2012).

#### Neighbourhood Ecology

Neighbourhood ecology refers to the immediate physical environment in which housing is located (Chambers et al., 2014). There are numerous neighbourhood features that scholars are interested in when studying housing, including public transport infrastructure (roads, sidewalks), walkability, public open space, and more (Villanueva et al., 2015). Of particular interest is access to quality greenspace.

Though under explored in the literature here, it is worth noting that the physical environment where housing is located is not simply material. Land often holds significant personal, emotional, and spiritual import for people living on it. For example, in an article by Mackenzie and colleagues (2017), they begin by telling a story about the importance of owning land for African refugees in Australia. Without land, there is no place for the ancestors to belong, there is no place to bury the umbilical cord of a newborn child so that they belong to the land, and it feels impossible to cultivate a sense of belonging in a new place. The meaning of the land itself may exist apart from the community that develops in that place, particularly for persons displaced from their ancestral home.

#### Community

'Community' here refers to the social characteristics (population, culture, social behaviour), amenities (playgrounds, schools, religious buildings), and services (grocery stores, health care facilities, social services, etc.) available within the neighbourhood (Chambers et al.,

2014). Community features have a major influence on how people feel about their homes. For example, Clark and Kearns (2012) found that people experienced greater feelings of control when they felt positively about the community they lived in. Conversely, community violence, vandalism, and incivility between community members can have a negative impact on how people feel about their housing situation.

## Relationship to Resilience

#### Physical Health and Safety

#### **Physical Structures**

The physical structure of housing is most directly related to physical health and safety (Franco Suglia et al., 2011). Most of the literature about the impact of housing quality explores the negative consequences of living with poor quality housing, rather than exploring the health-promoting quality of well-built homes.

Poorly designed or built homes may cause or contribute to various health issues. Cold, damp housing (because of poor insulation and costly heating) is a risk factor for the growth of household mold, which can contribute to respiratory illnesses. Additionally, 'unflued' gas heaters (which are disproportionately used in low-income households) contribute to indoor air pollutants, which also impact respiratory heath. One of the most significant consequences of these issues is asthma, particularly in childhood (Gillespie-Bennet et al., 2013). Gillespie-Bennet and colleagues (2013) also note how poorly built homes can contribute to slips, falls, and other household injuries, which can be costly on the health care system and affect disadvantaged populations at a higher rate (Gillespie-Bennet et al., 2013).

Housing designed with safety equipment can also be lifesaving in the face of fires or natural disasters. Roman (2017) describes how Hurricane Katrina survivors whose houses had been destroyed were given poor quality emergency homes that exposed them to high levels of formaldehyde. Additionally, several cases of exploding propane tanks were reported, which resulted in several house fires and even a few deaths. When FEMA redesigned temporary housing units for future disasters, they decided it was essential to include home fire sprinklers, which can significantly reduce deaths from home fires.

#### Neighbourhood Ecology

Neighbourhood features can also be health promoting. For instance, access to greenspaces may promote physical activity of local residents (Ambrey, 2016). Additionally, homes that come with land (or even patios) can be used to maintain home gardens. In a study about the use of home gardens in Cuba, Buchmann (2009) noted that home gardens became a significant source of fruits and vegetables to complement rationed food sources (like rice and beans) for most of the population. Home gardens usually only require small amounts of labour and space, which make them valuable for the average homeowner with little land, labour, or

time. However, being able to grow a portion of one's own food makes people more resilient in the face of shifting public resources by allowing people to provide for themselves. By being able to grow some of their own food, individuals become less susceptible to hunger and food scarcity caused by deficiencies in public programming or food shortages caused by environmental or economic hardship. Home gardens with a high level of plant diversity also helps to address often hidden nutritional deficiencies (Buchmann, 2009).

#### Community

Community features also have the potential to be health promoting. In a study comparing low-income individuals living in either advantaged or disadvantaged neighbourhoods in Australia, Browne-Yung and colleagues (2013) found that low-income members of the more advantaged community rated their health more highly than their counterparts in disadvantaged areas (Browne-Yung et al., 2013). One explanation for this is the higher density and/or quality of community amenities in wealthier areas. These amenities could include clean and safe parks, community centres, and health care facilities (Foley et al., 2018). Importantly, access to supermarkets and other healthy food sources is seen as an important factor in promoting physical health by lowering overall levels of obesity and chronic illness (Hamidi, 2020). Conversely, scholars and policy markers frequently note the perceived impacts of 'deprivation amplification' – the idea that community features like pollution, lack of public transportation, 'food deserts,' lack of health care facilities, litter, and more, can exacerbate preexisting health inequalities for residents living in disadvantaged areas (Foley et al., 2018). 'Food deserts' is a term used to describe how access to nutritious food can become extremely limited in low-income areas due to a lack of full-service grocery stores or supermarkets and a concentration of cheap but poor-quality food. Further, for low-income community members without means to travel to food outlets with lots of nutritious options and without adequate income to afford healthy options, it can be impossible to choose healthy options even when they are available (Hamidi, 2020).

#### Autonomy, Privacy, Security, and a Place to Rest

#### Physical Structures

Feelings of autonomy or control, privacy, and security were an important component of housing quality. These feelings are made possible by physical features of the housing itself. O'Shaughnessy and colleagues (2020) found that previously homeless individuals placed into housing through a Housing First service delivery model talked about the importance of having a front door. The front door, though a simple a material object, held a great deal of symbolic significance for participants. Having your own front door meant being able to close yourself away from the world when you want to be alone, being able to decide who comes in and out, and securing a place to store personal belongings (O'Shaughnessy et al., 2020). Importantly the physical structure of the house – doors, walls, window blinds, etc. – permit a great deal more

privacy than could be had without. Privacy is essential for performing basic functions like bodily hygiene and facilitates intimate personal relationships (O'Shaughnessy et al., 2020).

The authors reviewed for this brief frequently talked about feelings of autonomy or control in the housing environment. However, not all housed persons can exercise equal control over their environment, which can greatly impact their feelings of autonomy and privacy. For renters, this lack of control can be caused by having to wait on landlords to make essential household repairs, instead of being able to tackle these projects oneself (Franco Suglia et al., 2011). Taking on responsibility for repairs without landlords' approval has the potential to get tenants evicted, which impacts feelings of security as well (Easthope, 2014). There are, of course, small things people can do to improve feelings of control in the home environment, regardless of their status as renters (see Activities section below).

Clark and Kearns (2012) found that factors like housing layout, decoration, bathroom quality, available storage, and overall space were associated with feelings of control. However, feeling like one's home was physically secure (providing protection from outsiders or invasion) was the most significant factor that increased tenants' feelings of control in their space. Though the authors did not identify the mechanisms through which home security promoted feelings of control, it seems reasonable to speculate that this is also linked to being able to control who comes in an out of the home, when, and under what circumstances. A physically secure home would promote feeling of control over those decisions, whereas an insecure home would not allow inhabitants to feel in control of the space, since others could come and go without their permission. Thus, a physically secure home promotes physical safety. For people living in multistory buildings who fear crime in their neighbourhoods, having social ties with neighbours can help to decrease those fears. Additionally, apartment buildings themselves may confer a "fortress effect," whereby inhabitants feel positively distanced from the outside neighbourhood, which may be or feel like an unsafe place (Rollwagen, 2016).

#### 'Home'

Beyond the physical structure of housing, feeling 'at home' in the housing environment also contributes to feelings of autonomy, privacy, and security. One of the most important functions of housing is ontological stability, which is a psychological sense of stability derived from constancy. Simply put, not having to worry about having a roof over one's head is extremely important for being able to rest and take on other responsibilities in life. Once people feel secure in their housing, they can think about the other things they want to be doing with their lives (employment, personal goals, etc.) (O'Shaughnessy et al., 2020). Pruitt and colleagues (2018) found that Housing First recipients commented on how feeling secure in one's home provided them with the opportunity to rest and heal after the trauma of being homeless. Even in the case of those who are forced to move frequently, it is worth attempting to find different strategies to promote feelings of constancy and continuity in one's life — perhaps this involves having a back-up plan for where to stay if housing becomes disrupted or

having home-related rituals to take with you from place to place (ex: saying a prayer over one's home as the doors and windows are locked for the night).

Feeling at home is also connected to feeling a sense of autonomy and control over one's environment. For homeless residents receiving services on the 'Staircase' model of housing (which increases one's housed state in a graduated fashion based on the recipient's ability to meet the goals and expectations of housing caseworkers), O'Shaughnessy et al. (2020) found that while housing is provided to people who are deemed 'housing ready,' it often involves the submission of that person to the rules and regulations of the housing authority (such as sobriety, meal times, or others), which significantly limit a persons freedom to be who they are and do what they need to do. Control over one's environment is extremely important for freedom, autonomy, and self-actualization.

Interestingly, Kearns and colleagues (2000) found that living alone conferred greater autonomy and 'haven' benefits than living with others. This demonstrates that relational problems in the home can have a significant impact on whether or not the home feels like a safe haven in which one experiences feelings of control. These were also the only authors to note the gendered nature of the 'home as rest' idea, noting that for women in traditional roles, home may not be seen as a restful place, but as a place of work (Kearns et al., 2000).

#### Psychological Wellbeing and Distress

Though the pathways between housing and psychological wellbeing and distress were not always articulated clearly, many scholars noted the association between housing and wellbeing. In their study of Housing First recipients, Pruitt et al. (2018) found that all clients expressed mental health benefits of housing – such as improved self-esteem, feelings of hope, and self-efficacy. This was often accompanied by decreases in psychological symptoms from existing mental illnesses. Though the authors were unable to articulate the exact pathways between housing and positive psychological outcomes because of small sample size, it seems reasonable to suggest that moving from homelessness to housing enhances psychological wellbeing through factors like decreasing stigma around being homeless and reduced stress or anxiety around physical safety. Perhaps seeing a significant positive change in one's life (being housed after a period of significant housing instability) promotes feelings of hope because it provides a tangible example of how good things can happen.

#### **Physical Structures**

Perhaps unsurprisingly, having a physical place to go at the end of every day is important for psychological wellbeing. Franco Suglia et al. (2011) found that, independent of actual homelessness, housing instability (marked by frequent moves) can be a major contributor to poor mental health. However, the quality of the housing counts too. Evans et al. (2000) followed a cohort of Habitat for Humanity housing recipients before and after their move from low-quality housing, to high quality housing. In both housing recipients and housing-

stable controls, overall housing quality was a significant predictor of levels of psychological distress. This association remained even after pre-move mental health scores were accounted for. Evans et al. (2000) note that children living in low quality housing experience more punitive discipline and poorer academic performance than their well-housed counterparts. Housing of high quality has a sound structure (e.g., intact walls, ceiling, roofing, doors, windows, etc.), privacy (e.g., not having to walk through a bedroom to get to another area of the home), adequate indoor climatic conditions (e.g., adequate and functioning heat), minimal hazards (e.g., handrails on stairs, no nails sticking out of flooring or baseboards/casings), and is clean/low clutter (Evans et al., 2000).

Some structural or internal housing features have been more strongly correlated with psychological distress than others. For instance, housing disarray - characterized by living in a noisy and crowded home – and instability were linked with probable depression in a study by Franco Suglia and colleagues (2011). They also found that housing instability was correlated with probable generalized anxiety disorder (Franco Suglia et al., 2011). Lower quality homes were also found by Evans and colleagues (2001) to be generally more chaotic with clutter and promoted learned helplessness in children. Children living in lower quality housing, regardless of household income, also scored higher in psychological distress (Evans et al., 2001). This confirms previous findings that poor-quality housing was associated with more punitive discipline by parents and poor academic performance for children (Evans et al., 2000). The authors argue that their findings support the idea that poor quality housing promotes learned helplessness – the feeling that there is nothing one can do to change their situation, so why bother trying. Lower quality homes were also noticeably more chaotic (in this instance, with clutter) (Evans et al., 2001). Though the authors do not clarify if lower quality homes promote clutter or if this is strictly controllable by inhabitants, it seems likely there is a dual relationship here whereby controllable clutter reduces the quality of the home environment and lowerquality environments promote clutter through lack of adequate storage space and/or poor design. Living in poor quality housing (including high-rise living) has been found to have a number of negative psychological effects on children (marked by things like increased bedwetting, destructive behaviour, etc.) compared to children living in higher quality housing, even when matched for socioeconomic status and gender. High-rise living in particular, which is seen as generally poorer quality housing, may contribute to negative psychological effects in children because it limits the extent to which children can get outside to play and interact with others (Wells, 2000).

#### 'Home'

Though explored in more detail in other sections of this brief, feeling 'at home' in housing is believed to contribute to psychological wellbeing. "If we understand our home places through our interactions with the physical world, then it becomes clear that the dwelling—the environment where we spend a large proportion of our time—can have a significant impact on

our identity and well-being. In many cases, this is expressed in terms of the dwelling becoming a particularly significant type of place—a 'home' place" (Easthope, 2014, p. 581).

#### Neighbourhood Ecology

Finally, neighbourhood ecological features are believed to contribute to psychological wellbeing. Beyond the well-known benefits of physical activity, exercise in green spaces is assumed to confer additional benefits associated with being in nature (reduced stress levels, for example). Further, access to greenspace may confer positive benefits not associated with physical activity (Ambrey, 2016).

Studies have shown that increased interaction with nature has cognitive benefits across age groups. For example, studies have shown that prisoners with a nice view from their cell window have fewer infirmary visits, hospital patients with natural window views requested less pain medication and recovered more quickly than their counterparts without, and going for a nature walk can improve one's ability to perform well on a proofreading task (Wells, 2000). Additionally, available green space seems to have significant wellbeing benefits for children (Wells, 2000). Wells (2000) found that, even when overall housing quality was taken into account, the amount of greenness/naturalness available made a significant difference in children's cognitive function (especially attention) (Wells, 2000). In a study examining green space exposure and children's mental wellbeing, Feng and Astell-Burt (2017) found that children had lower total difficulty scores with exposure to higher green space quantity (but only when green space covered over 40% of area of the residential area/neighbourhood studied) and green space quality (good parks, playgrounds, and play spaces in the neighbourhood) (Feng & Astell-Burt, 2017). However, they found that those living in remote or socially disadvantaged areas tended to have the lowest exposure to greenspaces. Further, the authors noted the quantity and quality of green spaces available to children and families, but did not note when, how, and how much these spaces were used by children.

#### Self-Esteem and Social Status

Housing is closely related to one's self-esteem and social status. Several authors have argued that the home environment plays a major role in how people see themselves relative to others (Clark & Kearns, 2012). One argument is that the house is associated with self-esteem because of its affiliated status and how it acts as a representation of oneself. Clark and Kearns (2012) found that the impact of housing renovation on psychosocial wellbeing was entirely mediated by perceptions of home quality (i.e. feeling like your home is good quality is associated with benefits, regardless of improvements or not – though improvements may very well bolster feelings of good quality). The authors suggest that perceptions of quality might also be connected to social status. For example, factors like layout, decoration, bathroom quality, state of repair inside the home, and overall space were associated with perceived social status among research participants (Clark & Kearns, 2012). They suggest that finding one's own housing situation better off than that of others can be a factor that promotes self-esteem.

However, finding one's housing situation less favourable compared to others can negatively impact self-esteem. People finding themselves caught up in comparisons that negatively impact their self-esteem should find alternate ways to bolster the perceived quality of their home (see the Activities section below).

For low-income persons, Rohe and Stegman (2007) argue it is possible that homeownership places them a step above others in their class, which might bolster self-esteem. In their study of homeownership among low-income persons, they found that once other variables were controlled for they did not find that homeownership significantly increased self-esteem. However, higher levels of self esteem and life satisfaction were correlated with perceived housing quality (Rohe & Stegman, 2007).

Homeownership versus renting may impact self-esteem through social perceptions about what it means to rent. This can, in turn, affect how people feel about their status as a renter. Easthope (2014) argues that public attitudes about renting presumably have an impact on how policies are outlined to protect renters and the extent to which they can make 'home' in a rental property. In Australia, for example, the assumption is that renting is a short-term state, eventually leading to homeownership. As such, tenants have fewer rights and control over properties, which are seen as temporary forms housing. Conversely, in Germany, it is more common to rent over long-periods of time, which may explain why policy favours secure tenancy and responsibility of the renter to make changes/repairs to homes that they will presumably be invested in long-term (Easthope, 2014).

#### Connections with Others

#### 'Home'

Though not discussed extensively in the literature reviewed here, having a space where one feels 'at home' has been mentioned briefly as playing a significant role in cultivating and nurturing connections with others. In fact, Doucet (2013) suggests that being able to be oneself and being connected to others are important elements of what it means to feel 'at home.' Further, O'Shaughnessy et al. (2020) note that having housing meant that Housing First recipients could entertain and safely engage in intimate relationships because of the privacy and security that housing provides.

#### Neighbourhood Ecology

Several authors noted the landscape surrounding the place where one lives as an important mediator between people and the connections they have with others. Some authors focused on public open space as a mechanism through which social interaction and cohesion are promoted between people living in proximity to one another (Villanueva et al., 2015).

Mackenzie and colleagues (2017), in their discussion of the emotional and spiritual significance of land in the making of home, frequently talk about how land facilitates continuity

of relationships – not only the relationship between an individual and the land itself, but also to ancestors.

Finally, in their discussion of home garden use in Cuba, Buchmann (2009) draws attention to the highly communal nature of home gardening. Plants grown in home gardens played an essential role in local exchange and ritual practice. Further, growing medicinal plants to share with neighbours, if needed, was seen as an important way to increase one's status within a community. Most plant material in home gardens was given to growers as gifts from family, friends, and neighbours (Buchmann, 2009). This provides an example through which relationships amongst people are facilitated and enriched by the local ecology.

#### Community

Social connections with others in one's geographical area are important for promoting social wellbeing. Housing was found to have diverse impacts on the ways people connected with others in community. Pruitt et al. (2018) found that once previously homeless persons were housed, they felt like it was possible for them to reconnect with their communities through group activities, religious attendance, and more. However, they also noted some Housing First participants experienced feelings of loneliness after having moved from an established homeless community to living alone for the first time in a long time or ever (Pruitt et al., 2018).

Browne-Yung and colleagues (2013) found that low-income parents living in affluent neighbourhoods reported fewer community social ties than their counterparts in a more disadvantaged neighbourhood. The authors hypothesize this could be due to a felt need to conceal low-income status. However, they also found that these parents had more opportunities thanks to their connections with neighbours who had greater access to resources. That being said, living in an area where residents didn't feel they had the economic, cultural, or social capital to fit in was, itself, a source of stress which may or may not be mediated by other connections in their social networks (Browne-Yung et al., 2013).

#### Access to Resources and Supports

As alluded to previously, where housing is located influences a person's access to resources and supports needed to live a healthy life. Access to green space, grocery stores, health care, social services, and more have been discussed above (Ambrey, 2016; Feng & Astell-Burt, 2017; Franco Suglia et al., 2011). Land is also a valuable resource that may or may not be connected to one's housing situation. Having a small area of land available at one's home opens up the possibility of starting a home garden, which can promote access to fresh fruits and vegetables (Buchmann, 2009).

# **Improving**

Improving one's housing situation may involve a broad range of activities and interventions, depending on which component of housing is in highest need of being addressed. For those experiencing homelessness or housing instability, obtaining long-term, secure, and stable housing is of the highest priority. However, it can be helpful to begin with a broader definition of homelessness than 'sleeping rough' or otherwise living completely without shelter. "While absolute homelessness – living in an emergency shelter, on the streets or in parks – was once used as a barometer of precarious housing, the more recent literature has broadened the definition of homelessness to include temporary, insecure living situations (hidden homelessness) and living situations that are insecure, inhospitable, unstable or unsafe (relative homelessness)" (Chambers et al., 2014, p. 312).

The literature also draws attention to the way in which some populations are at higher risk for experiencing housing-related challenges. Pendall et al. (2012) describe populations they see as being particularly 'vulnerable' to precarious housing, which includes: the elderly and disabled (those with mobility limitations), racialized minorities (who may have access to fewer resources to sustain housing), recent immigrants, adults without a high school diploma, those living below the poverty line, veterans, children, and single-parent households. Precarious housing conditions increase with the number of vulnerabilities that a person has. Unsurprisingly, Pendall et al. (2012) found that income was the biggest factor associated with housing precarity – the higher the income, the less likely that people were to live in older, rental, overcrowded, or unaffordable homes. The affordability threshold for housing according to Canada Mortgage and Housing Corporation (CMHC) is 30% or less of total income (Chambers et al., 2014). Those living with significant housing precarity or instability may benefit from more formalized programs designed to secure stable housing for those in need. However, many people in more stable housing may benefit from some of the activities listed below, which describe some of the simpler ways that people can enhance their home to promote resilience and wellbeing.

#### **Activities**

While there are countless things people can do to improve their housing situation, we understand that people may be limited either financially or as renters to make changes to the home environment. The following list, while not inclusive of all possibilities, provides a handful of options for people to consider – from big moves and repairs to small home adjustments. People can pick and choose what is feasible and desirable to them.

#### Physical Structures

 Check out housing-related non-profits in your area. While there is considerable variation between cities and towns, some non-profits are designed to help with household repairs, finding funding for accessibility upgrades, paying first-months rent for people fleeing domestic violence, and more.

- If you're a homeowner and can afford to do so, or before buying a pre-owned home, it might be worth it to get a home inspection. Home inspection by a qualified professional can help you catch and repair household health and safety issues (like mould or pest infestation), which may prevent some accidents or illness (Gillespie-Benet et al., 2013).
- A low-cost humidifier or de-humidifier (depending on your needs) can be an effective way to manage humidity levels in the home for comfort and air quality.
- If needed and able, installing safety features in the home (e.g., bath hand, child safety locks, etc.) are usually fairly inexpensive and can help make your home safer.
- Regularly check your smoke and carbon monoxide detectors to make sure they are working (Roman, 2017).
- Install stronger locks on doors and windows if household security is a concern. Those with the means to afford it can also consider home security systems.
- If you aren't able to change the locks on your doors (for instance, because you require the approval of a landlord to do so), you might be able to install a fake camera or put up a "beware of dog" sign to deter potential intruders.
- Consider privacy blinds on your windows (O'Shaughnessy et al., 2020).
- If money is feeling tight, consider moving to a more affordable home if you can. Housing that takes up less percentage of your overall income can help to promote feelings of security in that space. Of course, this isn't a desirable or possible option for everyone.
- If you are going to buy or rent in a large, multistory building, try to secure a unit on lower floors (Wells, 2000).

#### 'Home'

- Make a list or diagram of everything that makes a house feel like home to you –
  afterward, you can sit down and compare the things on your list to your current housing
  situation. You might be able to find some quick fixes to make your space feel more
  homey. You might also identify some bigger issues to think about and plan for longerterm changes.
- Make a list of things inside your home that are within your control. Especially for renters
  who may feel a lack of control with their landlords, having a list of small things you can
  control can bolster feelings of autonomy (Franco Suglia et al., 2011; Easthope, 2014).
   Maybe you can't renovate the bathroom or kitchen, but you can organize the inside of
  your home in a way that suits you. Nothing is too small to put on your list.
- Rearrange your furniture this can be done to improve the amount of perceived space in the home or otherwise make your home feel refreshed.
- Use area rugs or blankets to make a space more cozy
- Find ways to express your personality in your space even if you can't paint the walls or hang pictures, adding small touches to a space can make it feel more personal (Clark & Kearns, 2012).

- Designate one spot in your home as a spot for rest and relaxation. Ideally, your bedroom should only be used for sleep and intimacy so that it always feels like a restful place; however, this isn't an option for everyone. Your restful space can be as big as a room or as small as a corner.
- Be intentional about who you share your space with. While this may not always be inside your control, limiting the people in your home to just those who you want to be there can make a big difference in how safe, private, and restful your home feels (O'Shaughnessy et al., 2020; Doucet, 2013).
- Manage internal noise and clutter (Franco Suglia et al., 2011; Evans et al., 2001). It may
  not always be possible to keep your home clean and quiet but having designated quiet
  times or doing a quick tidy every day can help your home feel more restful and in
  control.

#### Neighbourhood Ecology

- Find your closest safe green space (Ambrey, 2016). If the nearest one is a little ways from home, map out the easiest bus or driving route to get there. Knowing where it is and how to get there might help you to use it more often.
- Start a home garden in your yard or on your patio (Buchmann, 2009). It doesn't have to be big or expensive to be meaningful. You can cut costs by growing plants from seed and using old buckets or yogurt containers to grow in.
- If you don't have space to garden outside, consider bringing the outside in with a few house plants. Getting cuttings from friends and family is a cost-efficient way to start your own collection. You can also find low-maintenance plants that don't take a lot of work to care for, while still beautifying your space.
- If you have a window in your home with a really nice view, consider using that spot for your relaxation place or set up your desk there having a nice green view can boost concentration (Wells, 2000).

#### Community

- Create a community map that identifies the most important amenities in your area (grocery stores, community centres, health care centres, etc.). Know the routes to and from these important places.
- Make social connections in your local area (Browne-Yung et al, 2013) check out local groups that interest you (ex: parent groups, art groups, sports teams, religious communities, etc.).
- If your neighbourhood could use a pick-me-up, think about arranging a litter clean-up day in your community. Try teaming up with local groups to mobilize the community to take care of your neighbourhood. Likewise, together with fellow community members, you might even be able to tackle big community projects (like finding a space to start a communal garden or advocating for improvements to a local playground).

#### Interventions

#### Habitat for Humanity

Habitat for Humanity is a home-building organization that helps to rehabilitate and build affordable homes. People who apply for a Habitat for Humanity home take on a mortgage geared to their income level, pay no down payment, and volunteer 500 hours of their time to the organization. Volunteering takes the form of either participating in building their own home or working at a Habitat ReStore. The program also involves courses in personal finance, home maintenance, and other topics of interest. These programs are designed to make home ownership possible for people and families living on low incomes (Habitat for Humanity Canada, 2020). Habitat for Humanity programs are run in Canada, the United States, and internationally. Habitat for Humanity programs can positively affect participants' wellbeing and resilience (Evans et al., 2000).

#### **Housing First**

Housing First is a model of housing that is designed to move people immediately from homelessness (living on the street or in emergency shelters) into long-term, stable housing with whatever supports are necessary (Government of Canada, 2019). While there are many different ways of implementing Housing First, there are some key principles:

- "Rapid housing with supports: This involves directly helping clients locate and secure
  permanent housing as rapidly as possible and assisting them with moving in or
  rehousing if needed. Housing readiness is not a requirement.
- Offering clients' choice in housing: Clients must be given choice in terms of housing options as well as the services they wish to access.
- Separating housing provision from other services: Acceptance of any services, including treatment, or sobriety, is not a requirement for accessing or maintaining housing, but clients must be willing to accept regular visits, often weekly. There is also a commitment to rehousing clients as needed.
- Providing tenancy rights and responsibilities: Clients are required to contribute a
  portion of their income towards rent. The preference is for clients to contribute 30%
  of their income, while the rest would be provided via rent subsidies. A landlordtenant relationship must be established. Clients housed have rights consistent with
  applicable landlord and tenant acts and regulations. Developing strong relationships
  with landlords in both the private and public sector is key to the Housing First
  approach.
- Integrating housing into the community: In order to respond to client choice, minimize stigma and encourage client social integration, more attention should be given to scattered-site housing in the public or private rental markets. Other housing

- options such as social housing and supportive housing in congregate setting could be offered where such housing stock exists and may be chosen by some clients.
- Strength-based and promoting self-sufficiency: The goal is to ensure clients are
  ready and able to access regular supports within a reasonable timeframe, allowing
  for a successful exit from the Housing First program. The focus is on strengthening
  and building on the skills and abilities of the client, based on self-determined goals,
  which could include employment, education, social integration, improvements to
  health or other goals that will help to stabilize the client's situation and lead to selfsufficiency" (Government of Canada, 2019).

The Housing First model has been advocated for, not just on moral grounds but on economic ones, as an ideal model to respond to homelessness. The economic argument states that a chronically homeless person (without shelter for at least 12 months) can be housed for a mere fraction of the cost that taxpayers already shoulder for poorly rendered or misused social services (like through health care and justice related costs) accrued through homelessness (Evans et al., 2016). Goering and Streiner (2015) briefly summarized the findings from many (n = 80) papers written following the At-Home/Chez-Soi study on Housing First in Canada. The main conclusions they draw from those works include: Housing First is a very effective strategy at helping adults with mental illness to maintain stable shelter for longer periods of time; Housing First was associated with lower costs only for those with the highest levels of need (who were accessing extensive social and health services); the study was highly effective at communicating with policy makers because of its focus on economics; and the quality of the research was highly important in reaching the outcomes of the study (Goering & Streiner, 2015). In studies that explore the lived experience of Housing First recipients, most (or all) clients expressed the mental health benefits of Housing First – such as improved self-esteem, feelings of hope, and self-efficacy (O'Shaughnessy et al., 2020; Pruitt et al., 2018). This was often accompanied by decreases in psychological symptoms for homeless adults living with existing mental illnesses (Pruitt et al., 2018).

#### **Assessment**

#### Poor Quality Index (PQI) – American Housing Survey (Appendix A)

- Measures the level of physical deficiencies in housing units; it recognizes a broad range of deficiencies. The more deficiencies a housing unit has, the higher the score.
- Developed for an American population.
- 35-items
- See complete report here: https://www.huduser.gov/publications/pdf/AHS hsg.pdf

#### **Healthy Housing Index (HHI)**

• Assessment based on inspection by a trained building professional (Gillespie-Bennet et al., 2013); measures "building condition".

- Developed from the two National House Condition Surveys, the hazards highlighted in the HHSRS, and the New Zealand Standard.
- The format of the questionnaire follows the layout of the house, room by room.
- Developed and mostly utilized in Australia/ New Zealand.
- For more information and the full measure see here:
   www.healthyhousing.org.nz/research/past-research/healthy-housing-index/

# The Observer-Rated Housing Quality Scale (OHQS) – Rooming House and Single Occupancy Hotel Edition:

- Developed in Canada, based on an instrument developed by the Mental Health Commission of Canada.
- Has two main purposes:
  - To help clients looking for housing make an informed decision related to rooming houses and single occupancy hotels (SROs)
  - For community groups to consider whether a housing subsidy should be considered
- Find the full measure here: <a href="http://www.westbroadway.mb.ca/wp-content/uploads/2016/01/OHQS-FInal-RH-and-SRO-Final-Template.pdf">http://www.westbroadway.mb.ca/wp-content/uploads/2016/01/OHQS-FInal-RH-and-SRO-Final-Template.pdf</a>

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# Appendix A: Poor Quality Index

Table 1. Components and Weights for the PQI Score

Item	PQI Component	AHS Variable	Score (Weight)
	Electricity problems (15 points maximum)		
1	Unit does not have electricity	BUYE	10
2	Unit has exposed wiring	NOWIRE	4
	Unit does not have electric plugs in every room	PLUGS	3
4	Each occurrence of a blown fuse or thrown circuit breaker	NUMBLOW	1
	Heating problems (32 points maximum)		
5	Unit was uncomfortably cold for 24+ hours	FREEZE	4
6	Each heating equipment breakdown <sup>b</sup>	NUMCOLD	2
7	Unit cold due to utility interruption	WHYCD1	2
8	Unit cold due to inadequate heating capacity	WHYCD2	2
9	Unit cold due to inadequate insulation	WHYCD3	2
10	Unit cold due to other reason	WHYCD5	2
11	Main heating equipment is unvented kerosene heater(s)	HEQUIP	4
	Inside structural or other problems (22 points maximum)		
12	Water leak in roof	RLEAK	2
13	Water leak in wall or closed door/window	WLEAK	2
14	Water leak in basement	BLEAK	2
15	Water leak from other source	OTLEAK	2
16	Inside leak from leaking pipes	PILEAK	2
17	Inside leak from plumbing fixtures	PLEAK	2
18	Inside leak from other or unknown source	NLEAK (NLEAK1, NLEAK2)	2
19	Holes in the floor	HOLES	2
	Open cracks wider than a dime	CRACKS	2
21	Peeling paint larger than 8 by 11 inches	BIGP	2
	Evidence of rodents	EVROD (RATS)	2
	Bathroom problems (16 points maximum)		
23	Unit does not have hot and cold running water OR Unit does not have a bathtub or	HOTPIP, TUB, TOILET	10
	shower OR Unit does not have a flush toilet		
24	Each breakdown leaving unit without a toilet for 6+ hours	NUMTLT	2
	chen problems (10 points maximum)		
25	Unit does not have a refrigerator OR Unit does not have a kitchen sink OR Unit does not have a cook stove or range	OR Unit does REFR, SINK, COOK	10
- 10	Outside structural problems (35 points maximum) <sup>d</sup>		
26	Windows broken	EBROKE	5
27	Holes/cracks or crumbling in foundation	ECRUMB	5
28	Roof has holes	EHOLER	5
29	Roof missing shingles/other roofing materials	EMISSR	5
30	Outside walls missing siding/bricks/and so on	EMISSW	5
31	Roof's surface sags or is uneven	ESAGR	5
32	Outside walls slope/lean/slant/buckle	ESLOPR	5
	Water and sewer problems (32 points maximum)		
33	Each time unit is completely without water	NUMDRY	2
34	Each sewage disposal breakdown'	NUMSEW	2
	Elevator problems (4 points maximum)		
35	No working elevator in building of four or more stories	EVEL, CUMB	4

AHS = American Housing Survey. PQI = Poor Quality Index.

<sup>\*</sup>NUMBILOW takes values of 1 to 7 from 1985 through 1995; 8 is not answered; 9 is not applicable; it takes 1 to 8 from 1997 through 2011.

NUMCOLD takes values of 1 to 7 from 1985 through 1995; 8 is not answered; 9 is not applicable; it takes 1 to 8 from 1997 through 2011.

<sup>\*</sup> NUMTLR takes values of 1 to 7 from 1985 through 1995; 8 is not answered; 9 is not applicable; it takes 1 to 8 from 1997 through 2011.

Apparently, these questions applied to single-family units before 1997

<sup>\*</sup>NUMDRY takes values of 1 to 7 from 1985 through 1995; 8 is not answered; 9 is not applicable; it takes 1 to 8 from 1997 through 2011.

NUMSEW takes values of 1 to 7 from 1985 through 1995; 8 is not answered; 9 is not applicable; it takes 1 to 8 from 1997 through 2011.



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#### **Paul McGuinness**

**Operations Manager** 

**(**902) 494-8482

### Michael Ungar, PhD

Director

**(**902) 229-0434

