The background image shows three face masks hanging from a wooden clothesline against a light-colored wall. The masks have different patterns: one with brown and white geometric shapes, one with black and white polka dots, and one with black and white horizontal stripes. The text is overlaid on the left side of the image.

Housing vulnerability and well-being in the COVID-19 pandemic: A B.C. survey on the secondary effects of non-pharmaceutical interventions

From Community Housing Canada's Cross-Cutting Theme

Publication Date: August 2022



Title: Housing vulnerability and well-being in the COVID-19 pandemic: A B.C. survey on the secondary effects of non-pharmaceutical interventions

Authors: Yushu Zhu ^{a*}, Meg Holden ^a, Dorin Vaez Mahdavi ^a, Ziqing Amy Zeng ^b

a. Simon Fraser University

b. University of Toronto

** Direct all correspondence to Yushu Zhu at yushu_zhu@sfu.ca.*

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Student researchers

Ryan Lai	Simon Fraser University
Ellie Han	Simon Fraser University

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Glossary

CMHC – Canadian Mortgage and Housing Corporation

Housing tenure – this research operationalizes four distinct housing tenure types: outright ownership with no mortgage, ownership with mortgage, market rental (supported in a very small proportion of households by government subsidy via the Rent Assistance Program or RAP or the Shelter Aid For Elderly Renters or SAFER), and community housing rental.

Housing vulnerability – formally defined by Statistics Canada in terms of the presence of core housing need, meaning a household or housing situation that is unaffordable, insufficient in size, and/or inadequate in quality. In this report, we propose that the absence of housing vulnerability in the context of the pandemic is better defined by four additive components: housing adequacy, housing stability, adequate housing affordances, and neighbourhood accessibility.

Non-Pharmaceutical Interventions (NPIs) - behavioural rules imposed by public health orders in order to curb the spread of transmissible disease and in doing so generate secondary effects of an infectious disease; in this case, COVID-19. NPIs are often referred to commonly as physical or social distancing measures.

Well-being – employed in the sense used by the World Health Organization (WHO) in its classic definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” When reflecting on well-being outcomes, this report focuses on mental well-being – a positive state of psychological functioning or emotional feelings, and social well-being – adequate and well-functioning social relationships, social inclusion, and meaningful social participation.

Summary

Drawing on a representative sample survey of B.C. adult residents, this report examines different aspects of housing situations and factors that may increase housing vulnerability or resilience during the pandemic. We take this approach because of the significant impact of non-pharmaceutical interventions (NPIs), including the closure of non-essential services, and physical distancing measures, on people's homelives in B.C. during the COVID-19 pandemic, and the likelihood of significant disparities in the secondary effects of adapting to these NPIs for people in different housing situations. It is clear from the survey results that these secondary effects of the COVID-19 pandemic include deteriorating well-being outcomes for many B.C. residents. Housing, considered comprehensively to include people's private homes and their shared neighbourhood spaces, plays a crucial role in mitigating the disruption caused by the imposition of new rules (NPIs) designed to curb the spread of COVID-19. Key takeaways from this report include:

- British Columbians report feeling the impacts of NPIs on their daily life activities, and that these have physical, mental, and social well-being implications for them.
- Housing vulnerability manifests in multiple forms, some of them new to the pandemic context. Forms of housing vulnerability experienced include housing instability, housing inadequacy, limited housing affordances to practice physical distancing, and neighbourhood inaccessibility.
- Among the different tenure types we considered, market housing tenants experience the greatest prevalence of housing vulnerability.
- Strong relationships exist between housing situations and well-being outcomes. This tells us that housing plays a central role in building household resilience to cope with the COVID-19 pandemic, including its secondary effects, as we studied here.

Introduction

The COVID-19 pandemic transformed social life in British Columbia (B.C.) into a new normal, with social contact, travel, and activities severely restricted. Here in B.C. as in many other parts of the world, [non-pharmaceutical interventions](#) (NPIs) to combat the spread of COVID-19, were put in place via a series of public health orders that have spanned the long course of the pandemic to date. NPIs have included restrictions on our movement and mobility, including travel for work or leisure and travel within our home neighbourhoods and our private homes for daily necessities and social activities. NPIs have also included physical distancing measures designed to limit physical and social contacts in all aspects of our lives. Prolonged observance of NPIs could have unintended adverse outcomes for well-being, along with other possible downstream consequences, such as loss of income and inaccessibility of support services.

Based on the new rules imposed by NPIs, staying safe and healthy at home may have become an unattainable luxury, particularly for those whose home is unsafe, inadequate, crowded, unaffordable, or for those who are unhoused. Statistically, housing vulnerability is defined in terms of “core housing need,” which means living in housing that is substandard in terms of at least one of: affordability, crowding and dwelling quality (Statistics Canada, 2017). One-third of renters in Metro Vancouver are in core housing need, while 43% of renters in B.C. live in unaffordable housing (Statistics Canada, 2016). At the most extreme end of the housing vulnerability spectrum, 3534 people were identified as homeless in Metro Vancouver during the last homeless count in March 2020 (B.C. NPHA, 2020). These statistics represent hundreds of thousands of British Columbians living with different degrees of housing vulnerability. The COVID-19 pandemic, and the NPIs put in place to slow its spread, introduced new, second order dimensions of housing vulnerability. At the same time, housing stressors have intensified with the COVID-19 pandemic in ways we scarcely understand and what makes a housing situation or household vulnerable may have changed fundamentally.

In no way do we claim that these NPIs have been unnecessary in terms of their public health importance in the pandemic context. However, just as these NPIs represent interventions of a non-pharmaceutical nature into the daily lives of British Columbians, they also need to be understood for their secondary impacts on social well-being and daily life. This report begins to unpack the ways that the social and other secondary effects of NPIs in B.C. may have created new expressions of housing vulnerabilities in our homes and neighbourhoods.

Access to secure and decent housing is a basic building block for a good life. In contrast, the privation of access to decent housing subjects individuals and families to risks of poor well-being outcomes. Housing and neighbourhood environments influence well-being through pathways of residential stability, quality, safety, affordability, and access to neighbourhood services and amenities (Gibson et al., 2011; L. A. Taylor, 2018). When people live with housing vulnerability, they lack one or more of these building blocks of well-being.

Many kinds of housing vulnerability exist simultaneously in B.C.; we expect a crisis like the COVID-19 pandemic to exacerbate some or all of these and that new vulnerabilities may emerge. For those with poor quality housing, being required to stay at home for an extended period of time meant longer exposure time to housing-related health risk factors, such as poor indoor air quality, insufficient sunlight, and social isolation. For those already housed in crowded conditions, sharing their home spaces with housemates and neighbours became more challenging. More time at home, with compromised personal space and freedom, often meant increased household stress for those in housing vulnerability, and increased household conflict. Further challenges to housing affordability and accessibility of services and amenities were introduced by reductions in public transit service, hindering the mobility of those reliant on public transit to meet their daily needs, particularly for the elderly, people with disabilities, and women with small children. Those who lost their job or income faced new challenges to pay for housing and new stress in terms of risk of eviction. Many opportunities to socialize or exercise as means of stress reduction were also suspended. Many households lost all the opportunities they had pre-pandemic to socialize, participate in recreation and community volunteer work, and lost access essential services like the food bank, immigrant support services, or access to childcare. These new sources of housing vulnerability caused cascading negative impacts on social isolation and loneliness at home and were borne disproportionately by certain groups. All these new conditions of daily life, imposed upon B.C. households by the NPIs put in place to combat COVID-19, changed the dynamics and dimensions of housing vulnerability.

The present survey research draws on the reported experiences of B.C. residents of the secondary effects of NPIs, on their social and mental well-being, and their housing vulnerability. The results provide an initial sense of how multi-faceted housing vulnerability has been amplified and changed as a secondary effect of weathering the COVID-19 pandemic in our communities.

In this report, we first introduce our methodological approach and the data collected and analyzed here. This is followed by presentation of the key findings of the overall well-being status of the surveyed population, their housing experiences and vulnerability,

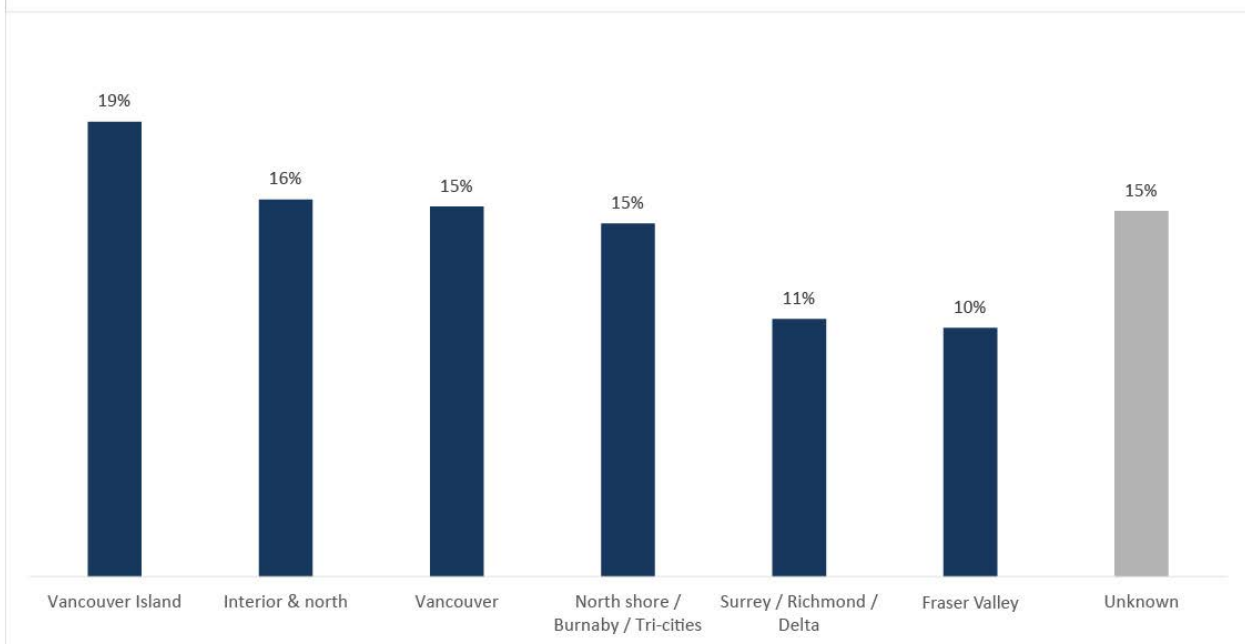
and the relationships between housing types and conditions and well-being. We conclude the report by summarizing the key takeaways of the research and provisional housing policy implications.

Data and Methods

Survey of B.C. residents

We conducted a B.C.-wide, representative sample survey of adult residents who had lived in the province at a minimum since March 2020, when the World Health Organization (WHO) declared COVID-19 a pandemic. The survey was in the field from March 25-April 9, 2021, and focused on self-reported well-being, experiences with physical distancing, and housing situations. In total, we surveyed 1,004 B.C. residents. The sample was randomly drawn and weighted using the 2016 census proportions for region, gender, age, and income distribution to better approximate a representative sample of the general population in B.C. The margin of error for the entire sample is +/- 3.09%.

REGIONAL DISTRIBUTION OF SURVEY SAMPLE



Note:
Percentage of regional distribution of survey sample. N = 1,004.

During this phase, Canada was undergoing the third wave of COVID-19 driven by the Alpha variant (Detsky & Bogoch, 2021). The confirmed COVID-19 cases reached a peak in April and dropped down to a low point toward the end of June. Canadians had experienced strict NPIs in the first six months of the pandemic such as closures of schools, provincial parks, indoor recreational facilities, and non-essential services, as well as prohibition of social gatherings. Many of these measures remained in place at the time of the survey or had been partially relaxed with the threat of being reimposed. When the survey was conducted, K-12 schools re-opened, public health guidelines for social gathering were relaxed for up to ten people outside a core household social bubble, outdoor worship services could include up to 50 people, and outdoor food and

drink services were allowed. However, [public health recommendations](#) to work from home and restrictions on non-essential and recreational travel stayed in place.

The timing of this survey, one year into the pandemic, offered a pivotal juncture to examine the impacts of NIP measures on well-being across the range of housing experiences and situations.

Key concepts: Housing vulnerability, tenure types, and well-being

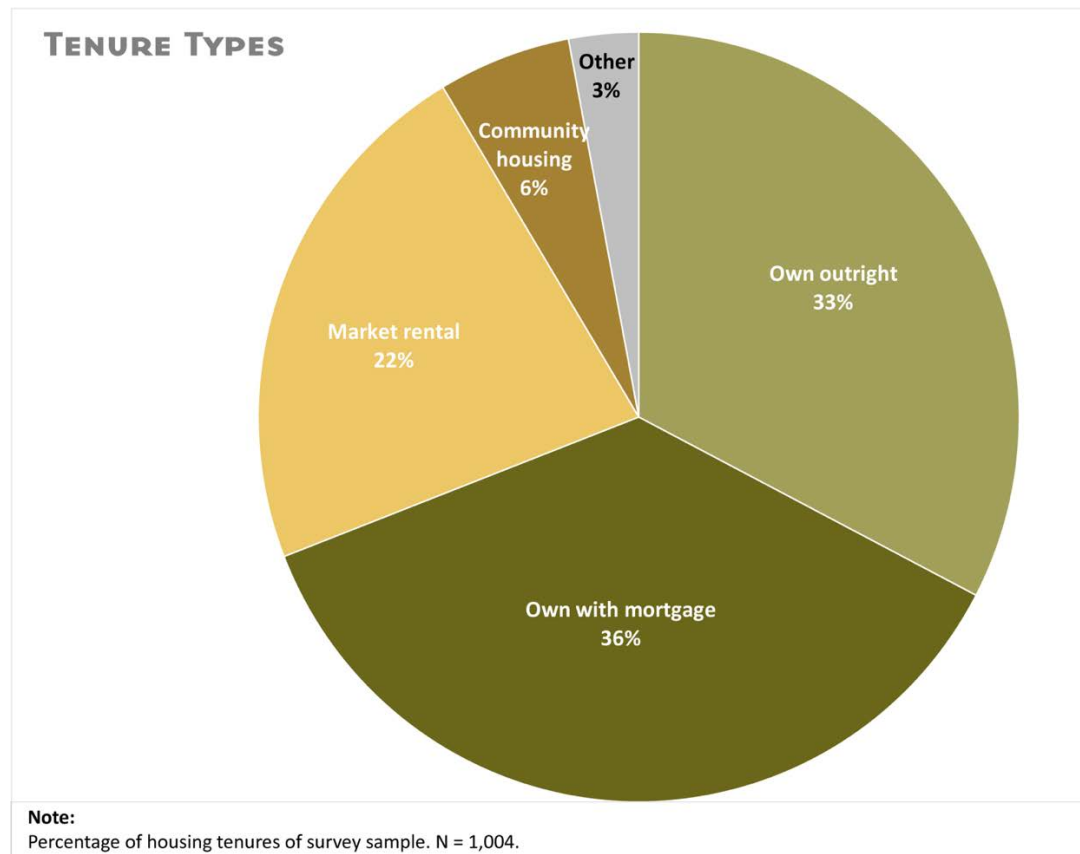
Housing vulnerability in this research means more than substandard housing as defined by “core housing need” (Statistics Canada, 2017). Particularly in the shadow of the NPI measures put in place to combat the spread of COVID-19, housing vulnerability may encompass a wide range of housing situations that expose individuals and families to potential risks of poor well-being, including lack of affordable and decent housing, limited capacity to practice physical distancing within one’s dwelling, and lack of access to neighbourhood amenities and resources. In this report, we operationalize an expansion of the definition of housing vulnerability in these three additional dimensions beyond the basics of an absence of core housing need. Stated in positive terms, we define the absence of housing vulnerability as consisting of the following four aspects:

- **Housing adequacy** mirrors the definition of core housing need used by CMHC and Statistics Canada. It is measured by self-perceived affordability, lack of crowding, and dwelling quality.
- **Housing stability** is our first incremental addition to the definition of housing vulnerability, beyond the basics of housing adequacy. It refers to respondents’ sense of their ability to stay in a housing unit for as long as they wish, without interruption or complication (Cox, 2017). Some manifestations of housing instability include frequent moves and forced moves such as eviction.
- **Housing affordances** is the next incremental addition to the concept of housing vulnerability that we operationalize here. The concept is used to describe the usage and perception by individuals of their built environment and how the physical space of housing is used and experienced by individuals. It is analogous to the concept of housing functionality employed by the Statistical Agency of New Zealand, understood as the degree to which housing supports the specific physical, mental, emotional, cultural, and social needs of individuals and families (Stats New Zealand, 2019). In the context of the pandemic, we define housing affordances as how the dwelling satisfies the needs of individuals and families to practice physical distancing and cope with the secondary effects of COVID-19.
- **Neighbourhood accessibility** is the final incremental addition employed here to complete the concept of housing vulnerability. Neighbourhood accessibility is measured as satisfaction with an individual’s access to neighbourhood amenities, programs, and resources important to them.

We also examine differential experiences of these components of housing vulnerability across housing tenure types. We classify **housing tenures** into four main categories, as follows:

- **Outright homeowner** (no mortgage) refers to respondents who report that they or their family members own the dwelling unit outright. Of those surveyed, 33% are outright homeowners.
- **Homeowner with mortgage** are respondents who report that they or their family members own the dwelling unit with a mortgage or housing loan. This group accounts for 36% of the total sample.
- **Market housing tenants** primarily comprise respondents who rent their dwelling at a market rate (22%). This group includes a small proportion of respondents who receive financial assistance (e.g. through the B.C. [RAP](#) or [SAFER](#) program) to rent in the private market.
- **Community housing tenants** are those living in public, co-op, or non-profit housing developed with government funding or incentives secured through extra-market arrangements with local governments or private sector partners. This group accounts for 6% of the survey sample, similar to the proportion of households living in community housing (5%) at the national and Metro Vancouver levels (Metro Vancouver, 2019; Suttor, 2016). Both supportive and independent social housing types are classified in this category.

The rate of homeownership (69%) based on this survey is close to the 70% rate identified in official B.C. statistics <https://www2.gov.bc.ca/gov/content/housing-tenancy/owning-a-home>. Twenty-nine respondents (3%) who did not fit into any of these categories may live at a relative's or friend's property, may be couch-surfing, homeless, or in an institutional housing situation. Because of the small size of this group and its mixed nature, we do not consider this category when comparing results across different tenure types.



Well-being We use the term well-being in accordance with the WHO definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1946). While we also assess physical health, this report is primarily concerned with mental and social well-being, which are inextricably linked in both cause and effect ways, and have multiple, complex relationships with housing vulnerability.

Mental well-being is used in this study to refer to a positive state of psychological functioning or emotional feelings. It is differentiated from mental health, a broader concept covering a spectrum from psychiatric diagnosis of mental health problems to positive mental well-being. Measures of mental well-being are adapted from the Psychological General Well-being Index (Grossi & Compare, 2014) and the five-item Satisfaction with Life Scale (Diener et al., 1985) to assess levels of anxiety, depressed mood, vitality, and happiness.

Social well-being is an integral component of health and wellness. Despite variations, social well-being is understood as encompassing adequate and well-functioning social relationships, social inclusion, and meaningful social participation (Keyes, 1998). The measures of social well-being are adapted from the Social Well-being Scales (Keyes, 1998). We examine three aspects of social well-being: **social integration**, which refers to the evaluation of the quality of one's relationship to society and community, is measured by a perceived sense of

belonging to one's community; **social contribution** is measured by people's sense of value and contribution to the community and the society; **social actualization** is the sense that society has potential which is being realized through its institutions and residents; this item is indicated by people's sense of general trust in others and social institutions.

Change in mental and physical health. We also assessed the impact of COVID-19 on health by asking self-perceived changes in mental and physical health during the course of the first year of the pandemic, on a five-point scale.

Well-being outcomes vary across socio-economic status and identities. Underlying differentials in various aspects of well-being may be systemic barriers and inequalities facing certain groups that warrant specific policy attention and interventions. This report primarily focuses on dissecting the relationship between housing situations and well-being. While the measures of housing tenure type, we employ do reflect some aspects of the systemic inequalities that we know exist in B.C. communities and affect the ability of different groups to obtain and maintain well-being, more intensive investigation of socio-demographic disparities in housing and well-being outcomes are out of the scope of this report.

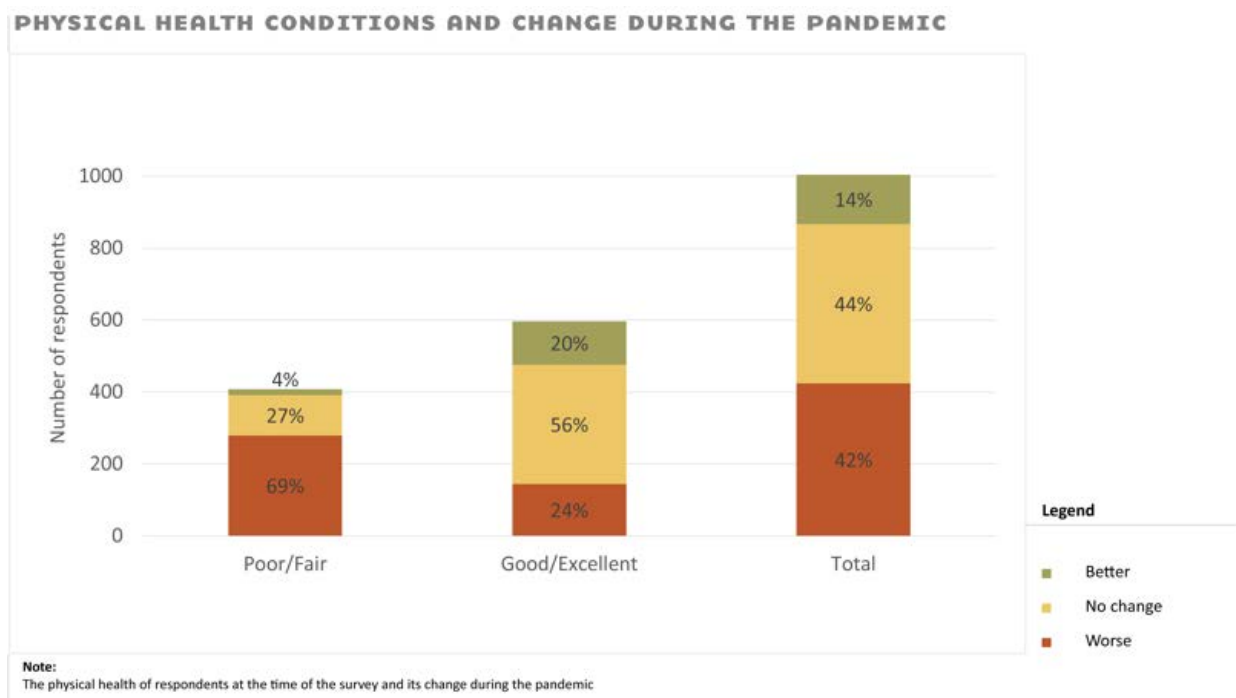
How are British Columbians faring during the pandemic?

At the time of the survey, most respondents reported worse physical and mental well-being than was the case for them pre-pandemic. In contrast, British Columbians seem to be coping well when it comes to social well-being. However, those reporting poor mental health also report worse social well-being, while those with good mental health tend to report good social well-being.

Physical well-being

Twenty-five percent of respondents are in poor or fair physical health, and 42% saw this worsen during the first year of the pandemic.

About one in four survey respondents was in fair or poor physical health at the time of the survey, and over 40% saw this worsen during the pandemic. People with poor health to begin with were particularly susceptible to experiencing worse physical health conditions during the pandemic.

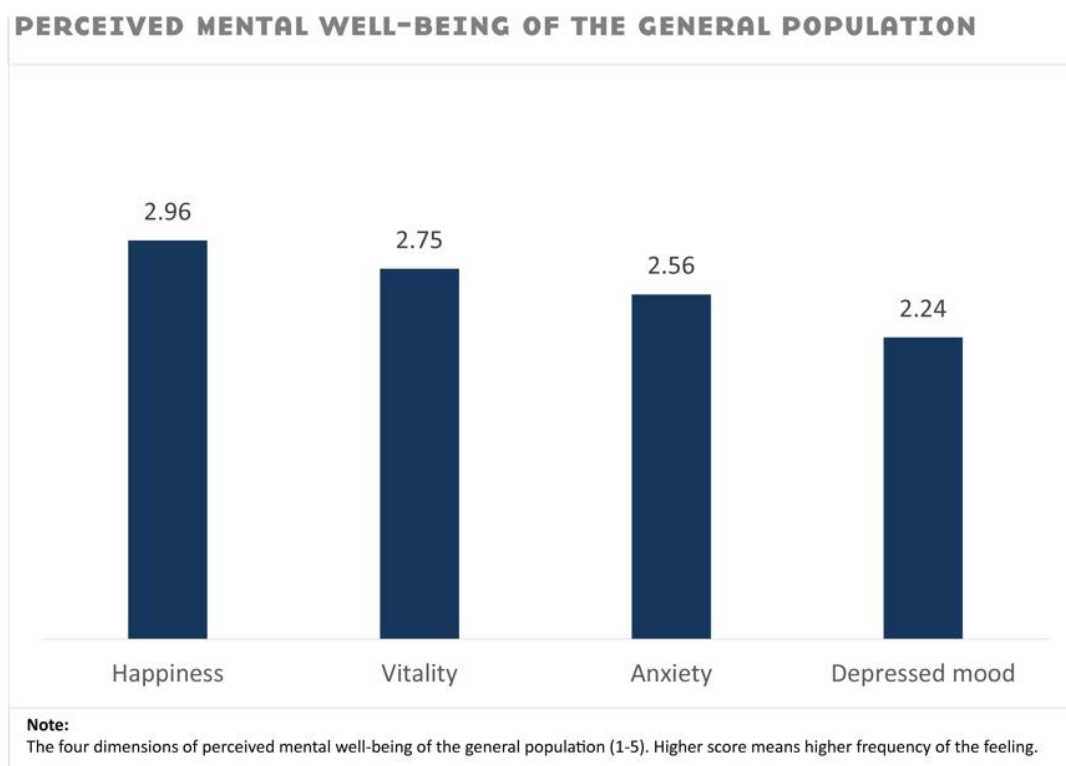


Mental well-being

One in three British Columbians reported poor or fair mental well-being, and half said it is getting worse.

More than one-third of respondents reported poor (11%) or fair (25%) mental well-being. Over half (51%) experienced worse mental well-being during the pandemic, compared to 39% experiencing no change and 10% who saw an improvement. This result is

comparable with those from [the B.C. COVID-19 SPEAK Round 2 survey results](#), in which 57% reported worsening mental health. In this survey, we break down the concept of mental well-being into four dimensions: depressed mood, anxiety, happiness, and vitality. On a 5-point scale, the experience of happiness and vitality is more common than depressed mood and anxiety. As was the case for physical health too, people with poorer mental health were more vulnerable to even worse mental health conditions during the pandemic.



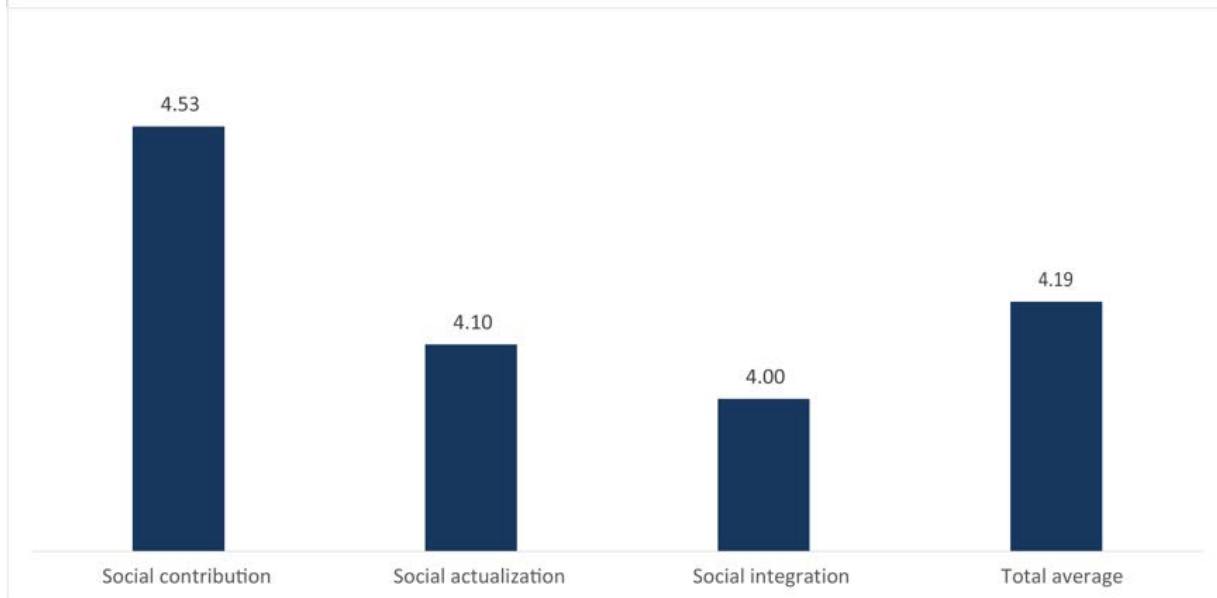
Social well-being

Respondents reported a weaker sense of social integration and social actualization, and a stronger sense of social contribution.

Overall, B.C. residents reported slightly positive social well-being (4.2 on a scale of 1-7). Survey respondents have a positive sense of their social contribution, reporting that they make a valuable contribution to their community and society at large. Social integration – people’s sense of belonging to their community and being valued by society – received the lowest score among social well-being measures (4.0); public health restrictions that reduced social interactions have made it more difficult for many to feel that they belong. A recent survey (SFU Research Team & HNC, 2021) of multi-unit rental housing tenants in B.C. shows a similar result that 40% of respondents did not know their neighbours well enough to ask for help when needed. Social actualization, people’s sense of trust in one another and in social institutions, also received a lower score (4.1) than the overall social well-being score. This may imply a

sense of mistrust among neighbours as well as mistrust of social organizations, including government.

SOCIAL WELL-BEING OF GENERAL POPULATION



Note:

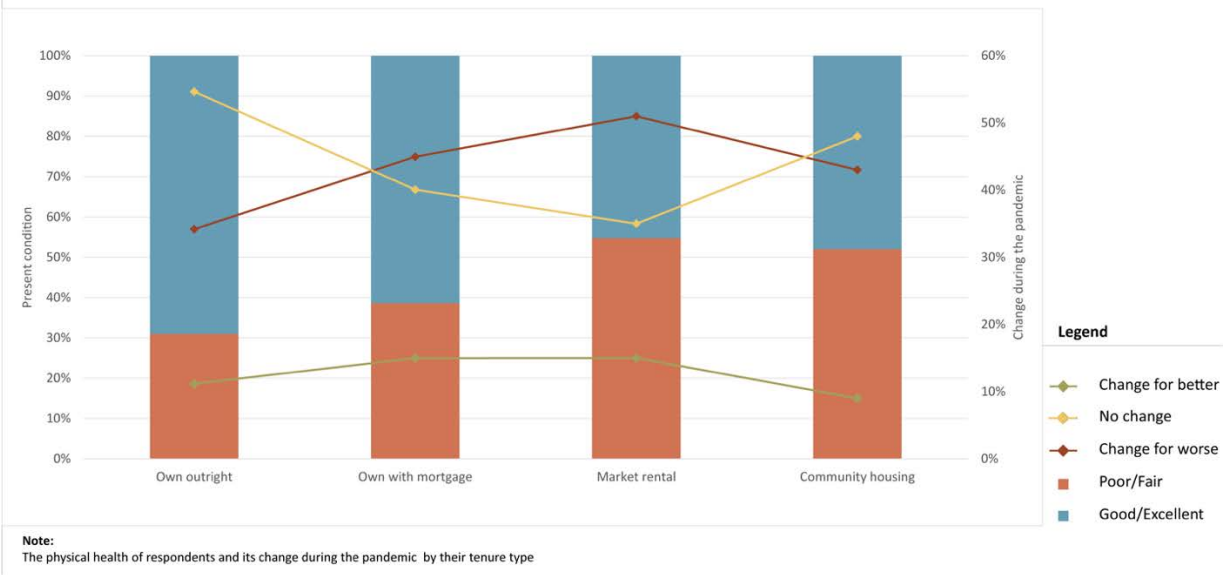
The three dimensions of social well-being of the general population and the total average score (1-7). Higher score means more positive responses.

Housing tenure and well-being

Market housing tenants and homeowners with mortgages were most likely to report physical health declines during the pandemic.

In general, homeowners were in better physical health than renters. Homeowners reported poor or fair physical health much less frequently than those in other housing tenure types. However, the pandemic has disproportionately impacted the physical health of market rental tenants and owners with mortgages. More respondents in these two groups said they experienced worse physical health during the pandemic than those who reported improvement or no change in physical health. Surprisingly, respondents in these two groups were more likely than community housing tenants to report a decline in their physical health during the pandemic.

PHYSICAL HEALTH AND CHANGE BY HOUSING TENURE

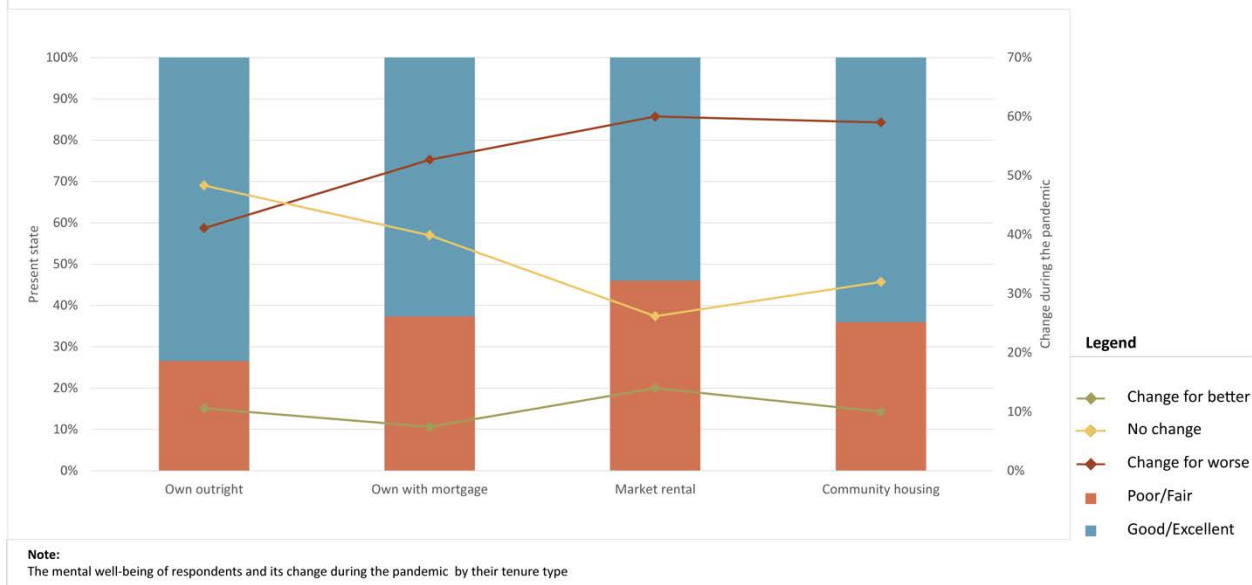


Market rental tenants were the worst off in terms of mental well-being.

Among housing tenure types, outright homeowners were faring the best regarding mental well-being while market rental tenants fared the worst. Community housing tenants reported the same levels of good or excellent mental well-being, on par with those who own with a mortgage. This better sense of mental well-being among community housing tenants may be related to the social environment offered in a community housing setting, to the specific non-market way in which community housing is obtained and managed, or to tangible, specific services and supports offered in some of these housing communities.

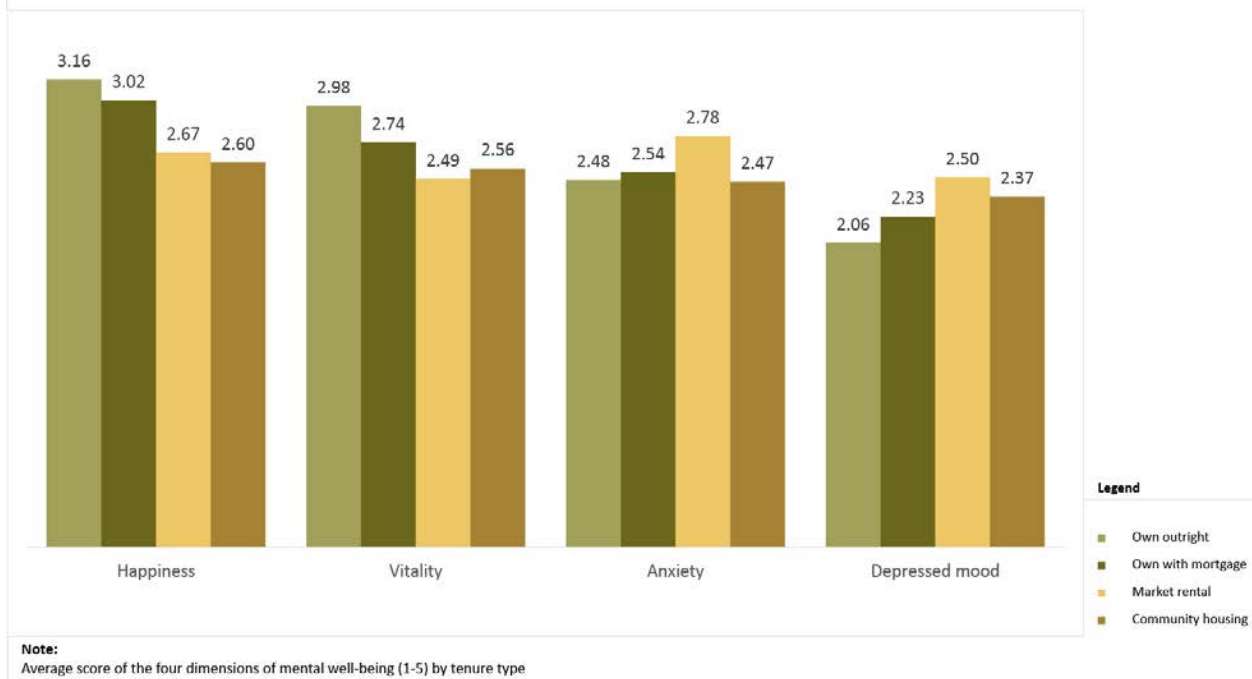
Over one-third of homeowners with mortgages and over 40% of market housing tenants reported poor or fair mental well-being at the time of the survey. Around 60% of both market and community housing tenant groups reported a deterioration in their mental health, with smaller shares of owners with mortgages (53%) and homeowners (41%) reporting the same.

MENTAL WELL-BEING AND CHANGE BY HOUSING TENURE



When the mental well-being concept is broken down, market rental housing tenants experienced anxiety (2.78) more often than vitality (2.49) and happiness (2.67). In contrast, homeowners are much more likely to report positive emotions such as happiness and vitality than negative feelings such as anxiety and depressed mood. Community housing tenants show the most even responses across the dimensions of mental well-being.

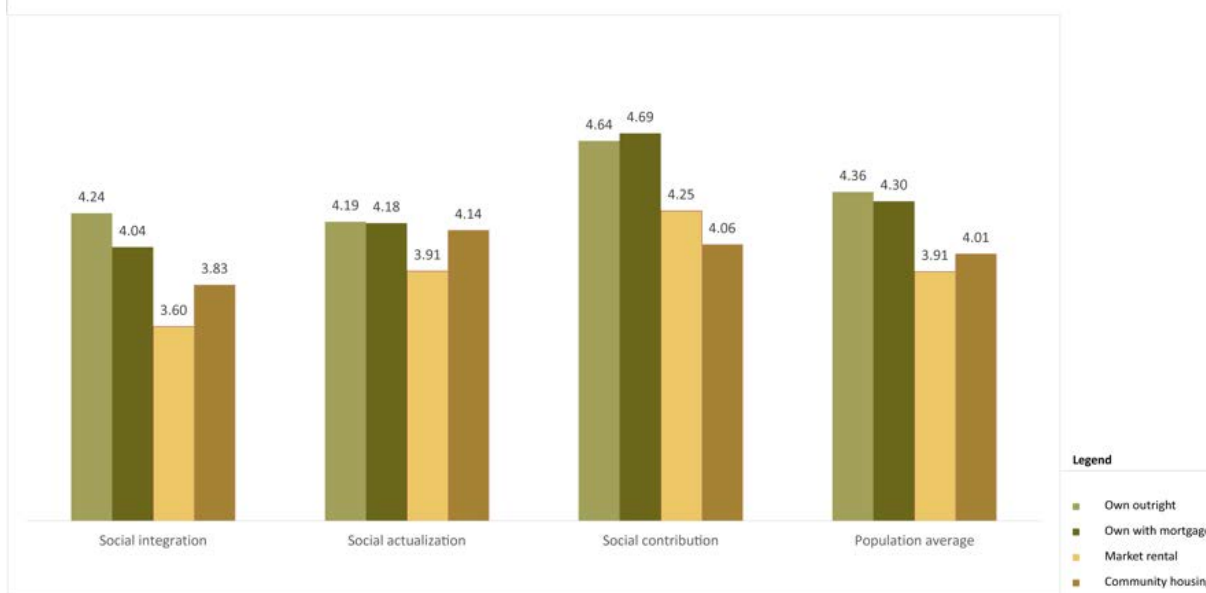
DIMENSIONS OF MENTAL WELL-BEING BY HOUSING TENURE



Market housing tenants were the worst off in terms of social well-being.

Overall, homeowners reported positive scores (greater than 4 out of 5) in all dimensions of social well-being. In contrast, tenants had a less positive sense of social well-being. This includes a less positive sense of social integration in particular – the average scores for this item are below 4 for the two renter groups. Notably, market housing tenants reported the lowest scores for social integration (3.6). The slightly higher levels of social integration and actualization among community housing tenants may demonstrate that community housing operators and operating models provide qualities that reduce vulnerability for their tenants. Also, community housing tenants appeared to have been less negatively affected in terms of their ability to maintain social interactions. About 43% of community housing tenants reported reduced social interactions during the pandemic, compared to 63% of market housing tenants and 62% of homeowners with mortgage.

SOCIAL WELL-BEING BY HOUSING TENURE



Note:
Average score of the dimensions of social well-being (1-7) by tenure type

Housing vulnerability during the pandemic

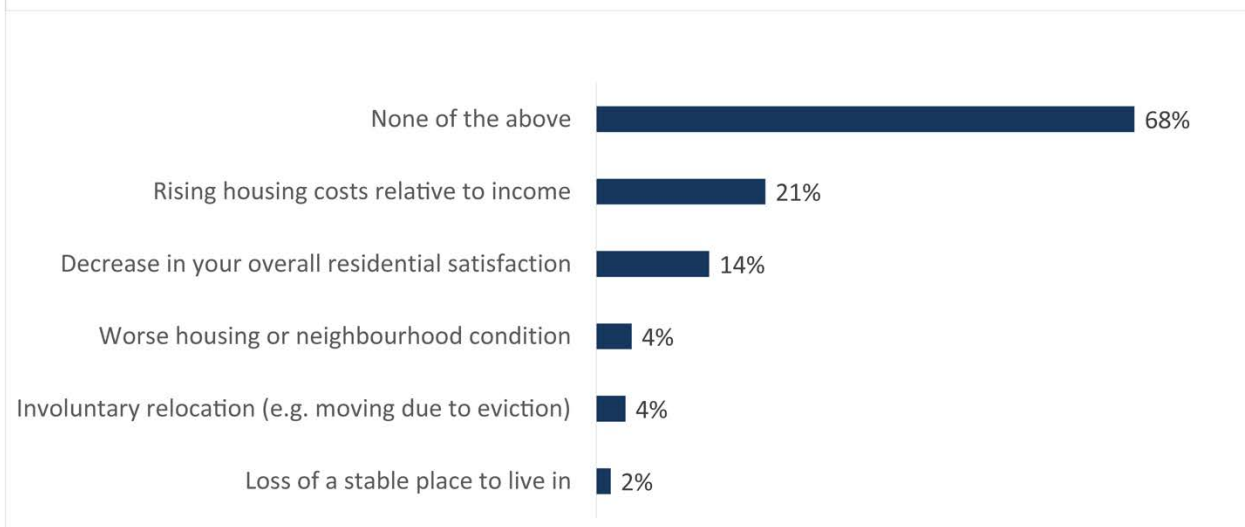
Our survey revealed how NPI measures had secondary impacts on B.C. residents at home, in terms of emerging dimensions of housing vulnerability that have become apparent during the pandemic. Housing instability, housing inadequacy, lacking the ability to practice physical distancing at home, and reduced access to neighbourhood amenities and resources are some of the downstream effects of NPIs. The degree of housing vulnerability varies across different tenure types.

Adverse housing experiences during the pandemic

More than one in three respondents encountered housing adversities.

The pandemic has exacerbated housing stress for many people. Over one-third of the survey respondents reported an adverse housing experience. The most common was rising housing costs relative to income (21%) followed by decreased residential satisfaction (14%). Other residential adversities include worsened housing or neighbourhood conditions (4%), involuntary relocation (4%) and loss of a stable place to live (2%).

EXPERIENCE OF HOUSING ADVERSITIES DURING THE PANDEMIC



Note:

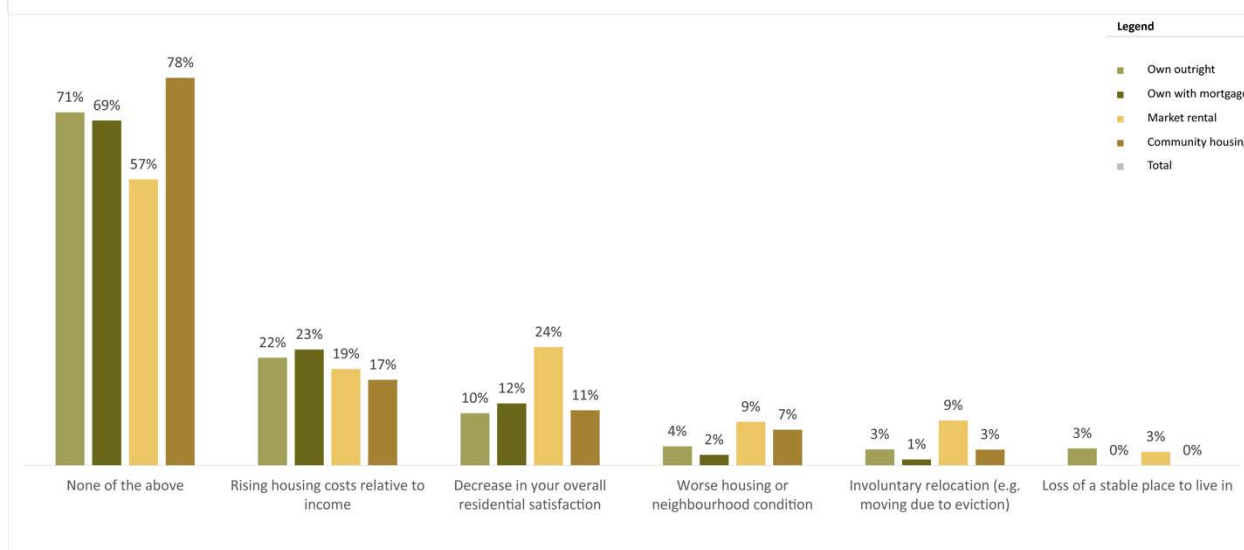
Q: Since the COVID-19 pandemic outbreak in Canada in March 2020, have you experienced the following residential situations? Please choose all that apply.

Market housing tenants were more likely than homeowners and community housing tenants to encounter housing adversity.

The adverse housing experiences reported vary across different housing tenures. Interestingly, community housing tenants were the least likely to experience housing adversity during the pandemic, even compared with homeowners. In contrast, market housing tenants were most likely to experience a decrease in satisfaction with their

home, to face deteriorating housing or neighbourhood conditions, or involuntary relocation. Notably, although homeowners are better off in all other aspects, lower percentages of renters encountered exacerbated housing unaffordability, likely due to the [rental increase freeze](#) put in place by the Government of B.C. early on in the pandemic.

HOUSING ADVERSITIES BY HOUSING TENURE



Note:

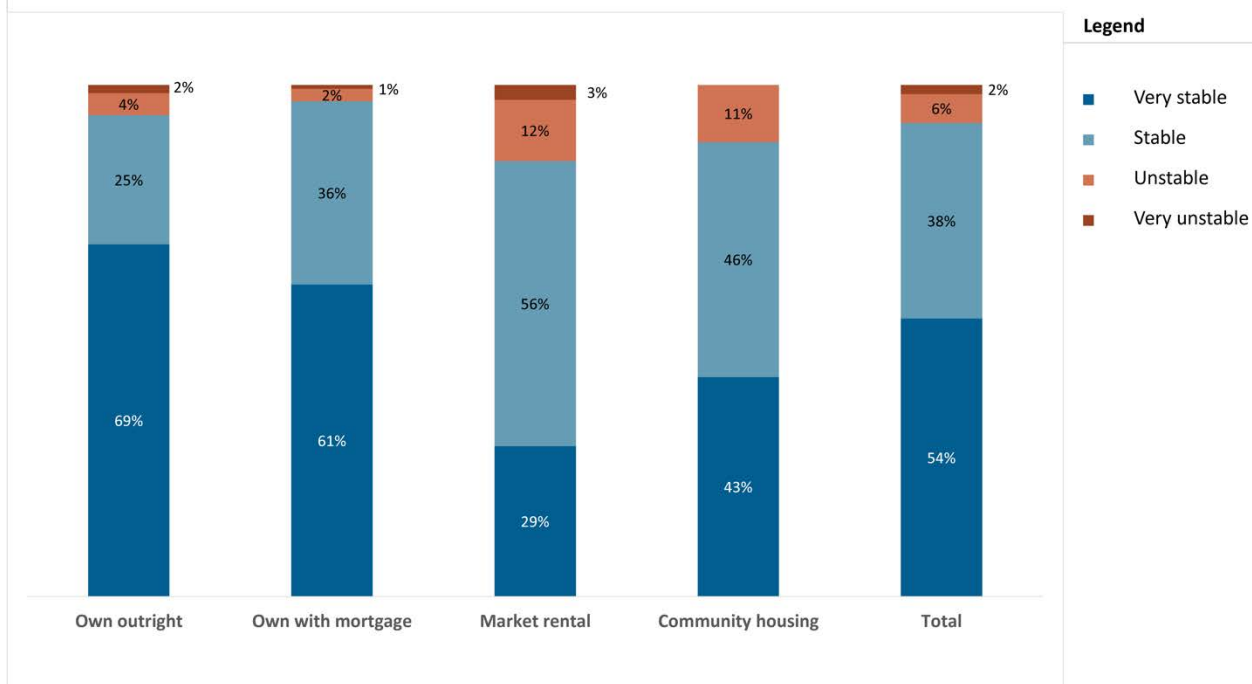
Q: Since the COVID-19 pandemic outbreak in Canada in March 2020, have you experienced the following residential situations? Please choose all that apply.

Housing instability

Low-income market housing renters were the most likely to experience housing instability.

Housing instability is an important manifestation of vulnerability during the pandemic. Our survey results reveal that 15% of market housing tenants felt their housing situation was unstable or very unstable, compared to 11% of community housing residents, 6% of homeowners without a mortgage, and 3% of homeowners with a mortgage. Unsurprisingly, the majority of market housing tenants (60%) and community housing tenants (83%) who reported housing instability were low-income households.

HOUSING STABILITY BY TENURE TYPE



Note:

Q: How stable do you feel your current housing situation is?

1

Housing inadequacy

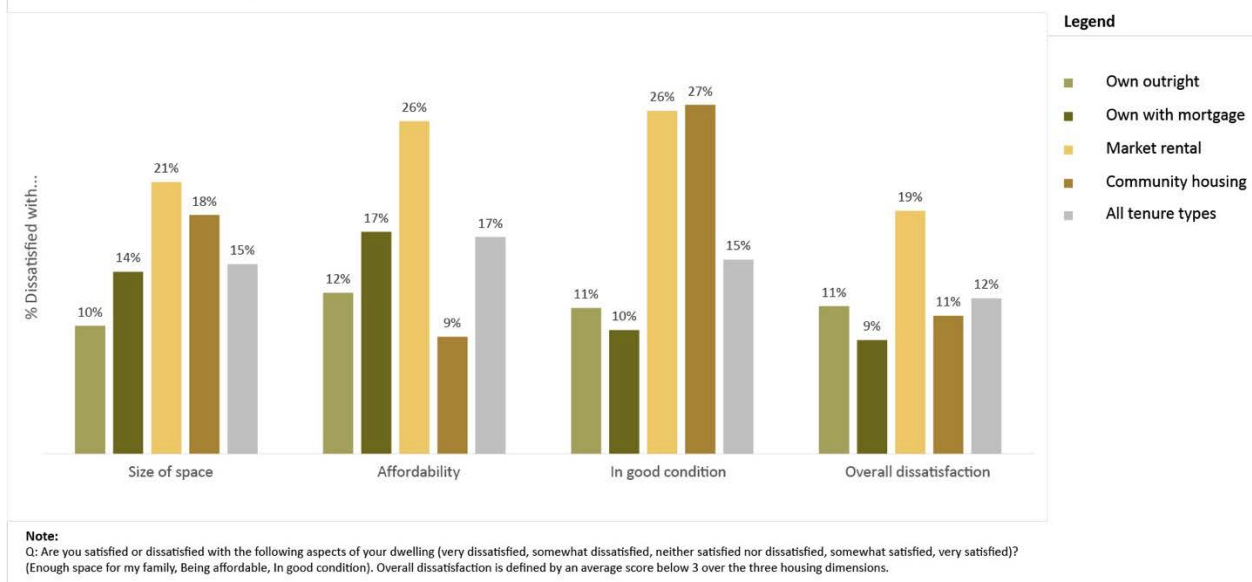
Market housing tenants were most likely to live in inadequate housing.

Among all tenure types, market housing tenants were most likely to live in inadequate housing. Compared with the general population, they reported low overall satisfaction with housing adequacy. Specifically, they had the highest level of dissatisfaction with overall housing adequacy (19%). This group expressed high levels of dissatisfaction regarding all three dimensions of housing adequacy, i.e., affordability (26%), dwelling condition (26%), and size of living space (21%).

Community housing tenants fared much better than their market rental counterparts in terms of housing adequacy: Only 11% were dissatisfied with overall housing adequacy. This group was particularly satisfied with their housing affordability. They were also slightly more satisfied than market housing renters with the size of their dwelling (18% vs 21% dissatisfied). Similar to the situation for market rental tenants, community housing residents were most likely to be dissatisfied with the condition of their dwelling (27%).

With or without a mortgage, homeowners were in better housing situations than renters. However, homeowners with mortgages were more likely to encounter affordability and crowding issues than were outright owners.

HOUSING INADEQUACY BY TENURE



Limited housing affordances

Market housing tenants faced the most housing constraints.

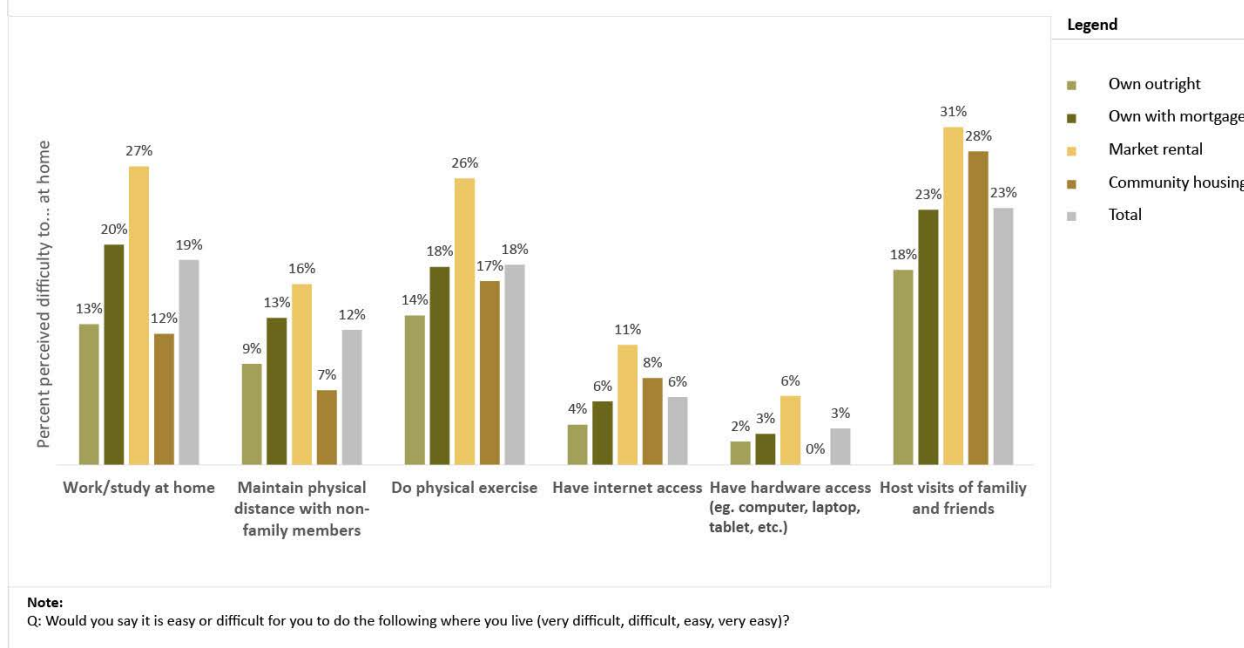
The difficulty of staying at home safely and comfortably during the pandemic has been a challenge for some British Columbians. Overall, the primary challenges faced by our respondents from NPIs came when respondents wanted to host occasional visits of family members and close friends (23% said this was difficult for them), to work or study at home (19%), and do physical exercise at home or in the neighbourhood (18%). A sizable proportion (12%) also expressed that they had difficulty maintaining the recommended physical distance from non-family members. We refer to these as limits to housing affordances.

Staying home safe and healthy was particularly challenging for market housing tenants. This group faced above-average housing affordability challenges in all aspects, including challenges accommodating occasional visits from family members and friends (31%), working/studying at home (27%), doing physical exercise (26%), and maintaining physical distance with non-family members (16%). Part of the reason for these results is that market housing tenants are more likely to co-house with non-family members. In contrast, community housing tenants faced fewer challenges staying at home than market housing tenants or, in some cases, even homeowners with mortgages; they were more likely to safely continue their healthy daily life activities at home. A higher percentage of community housing (28%) and market housing tenants (31%) reported difficulty hosting occasional visits by family members and friends. This could be due to limited space at home or due to rules or expectations put in place in their buildings.

Owners with a mortgage faces some similar challenges as market housing tenants, such as challenges hosting occasional visits of family members and close friends (23%)

and challenges working or studying at home (20%). This may be due to limited space at home.

PERCENT PERCEIVED DIFFICULTY TO ... AT HOME



Vulnerability in terms of neighbourhood accessibility of resources, services, and amenities

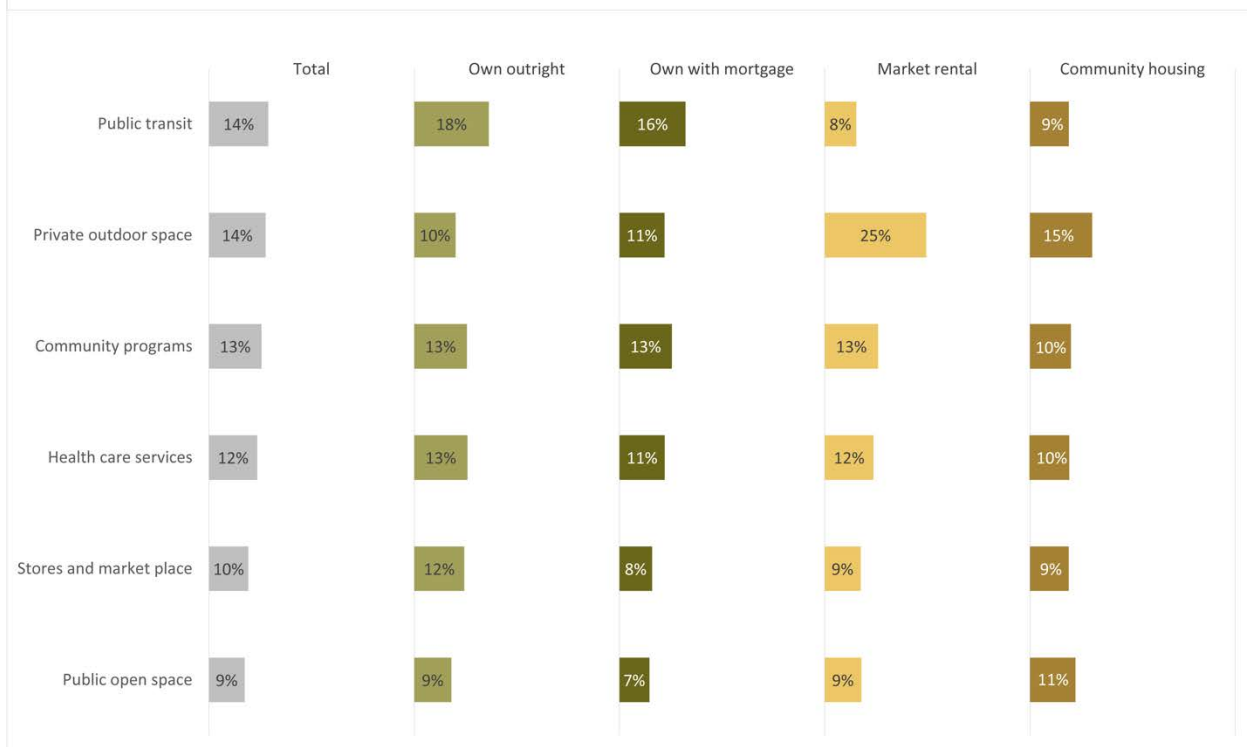
During the pandemic, people's home neighbourhood environment became particularly essential for social connections, health-promoting behaviours, and a range of health outcomes. Housing vulnerability is also a function of the accessibility of various resources, services, and amenities close to one's home. In this report, we assess neighbourhood accessibility by taking the average level of reported satisfaction (1-5) with access to various neighbourhood amenities and facilities, such as public transit, shops and stores, private and public open space, and community programs.

Homeowners were the most dissatisfied with their access to public transit, whereas renters were the most unhappy with their access to private outdoor space.

Overall, many survey respondents were satisfied with neighbourhood accessibility. Homeowners were less satisfied with their access to public transit than was the case for their renter counterparts. This is perhaps due to the relative lack of public transit in areas that are more dominated by homeowners. While satisfied with the accessibility of various amenities, market housing tenants were much more dissatisfied than others in terms of their access to private outdoor space. Many of these residents felt deprived of access to parks and public spaces during pandemic restrictions and many tenants lived in apartments with no balcony or access to private outdoor space. A higher-than-

average percentage of community housing tenants were also dissatisfied with their access to private outdoor space (15%), but they showed a lower level of dissatisfaction with neighbourhood access to public transit, community programs, and health care services. The findings on the significance of private outdoor spaces during the pandemic are consistent with [recent calls](#) for access to private outdoor spaces such as gardens and patios which are conducive to mental health.

PERCENT DISSATISFIED WITH NEIGHBORHOOD ACCESSIBILITY TO ...



Note:

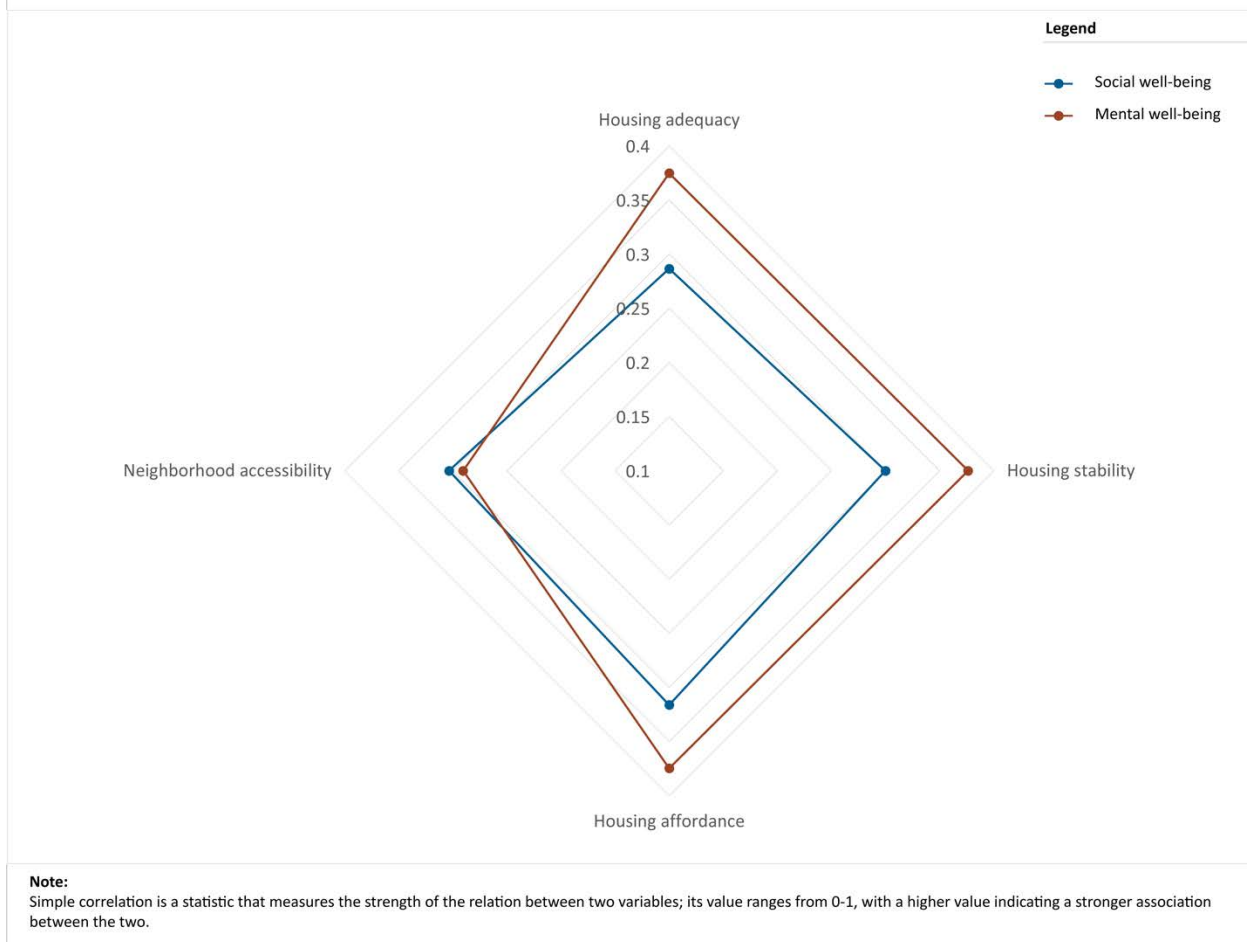
Q: How satisfied are you with the following aspects of your neighbourhood/complex (very dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, somewhat satisfied, very satisfied, not applicable or not aware)? If these amenities/services are not available to your knowledge, please choose "Not applicable or Not aware".

Housing and well-being during the pandemic

Housing influences well-being outcomes via many pathways. Our results show that housing may influence well-being via features of housing stability, adequacy, affordances, and neighbourhood accessibility to key services and amenities. These qualities of home and neighbourhood environments directly impact a person's well-being. The COVID-19 pandemic also revealed that housing vulnerabilities impacted well-being in an indirect way, due to the secondary effects of COVID-19 NPIs on physical activities, economic situations, social relations, service accessibility, family relationships, and more. The impacts of these secondary effects were borne differently by people in different housing tenure types and certainly, also, by households with different socio-demographic and economic characteristics.

To gain a general picture of how different functions of housing vulnerability are associated with well-being, we present simple correlation coefficients between different housing indicators and well-being scores. All four functions of a lack of housing vulnerability are positively associated with both social and mental well-being, although the correlations between housing adequacy, stability, affordances and neighbourhood accessibility and mental well-being are stronger than the case with social well-being. Among these housing indicators, neighbourhood accessibility shows a relatively weaker association with well-being, perhaps indicating the strong psycho-social impact of the compulsion to spend more time at home than in the neighbourhood during this period of the pandemic.

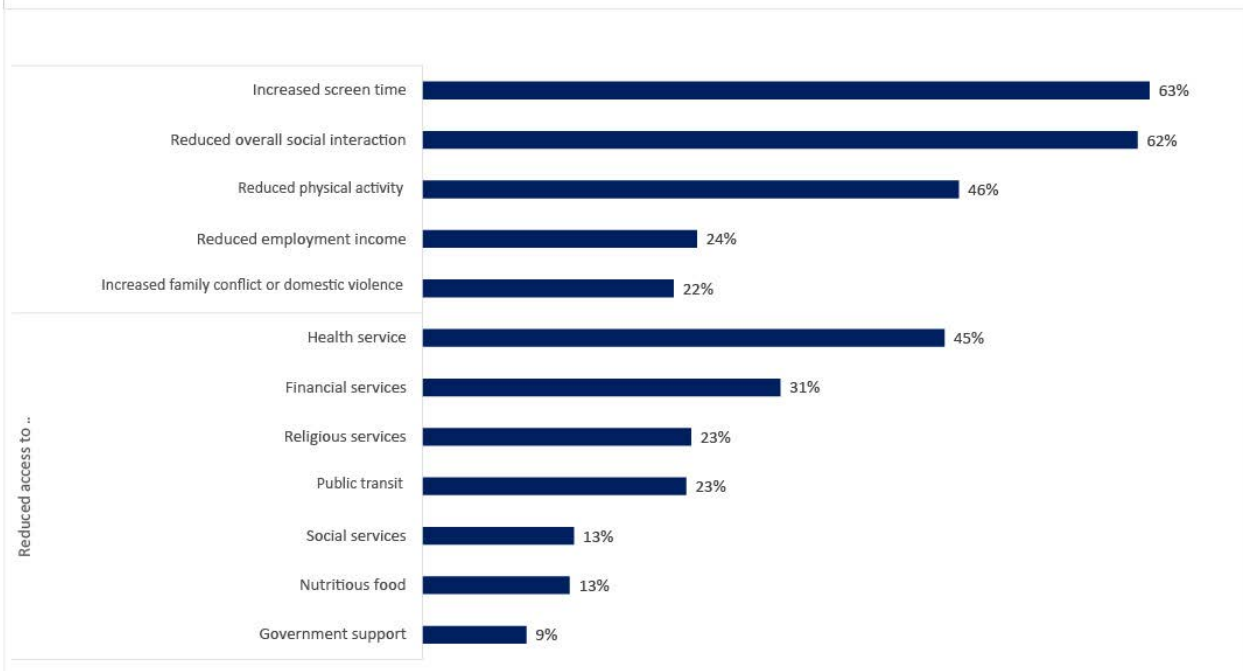
SIMPLE CORRELATION BETWEEN DIFFERENT DIMENSIONS AND WELL-BEING



Housing, secondary effects and well-being

The public health measures put in place to protect against the spread of the COVID-19 pandemic had many secondary effects on the daily activities of B.C. residents. These effects included increased screen time (reported by 63% of respondents), reduced social interactions (online or offline) (62%), and reduced physical activity (46%). Noteworthy is that more than one in four survey respondents reported an increased frequency of conflict with family members (20%) or domestic violence (4%).

SECONDARY EFFECTS OF COVID-19 AND PHYSICAL DISTANCING MANDATES

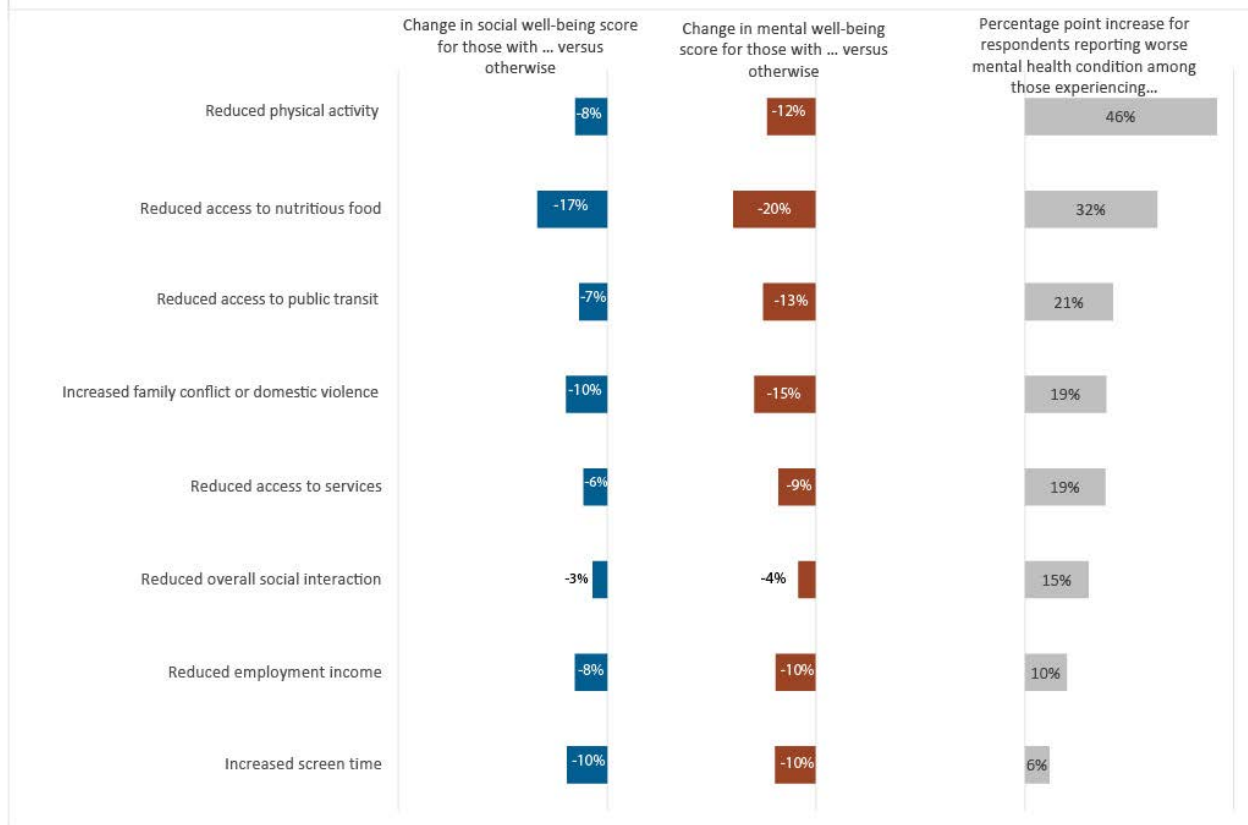


Note:

Q: Since the introduction of social distancing measures due to the COVID-19 pandemic, how have each of the following changed for you? (Significantly reduced, Somewhat reduced, No change, Somewhat increased, Significantly increased, Not applicable or Not aware (I never had this activity/situation)). If you have never had the following activities or situations, please choose "Not applicable or Not aware."

Reduced access to various resources and services was another major secondary effect of COVID-19 restrictions on mobility and human contact. Many respondents reported reduced access to health services (45%) and financial services (e.g., banks) (31%). Nearly a quarter of those surveyed also reported reduced access to religious services (23%) and public transportation (23%).

SECONDARY EFFECTS AND WELL-BEING



Note:

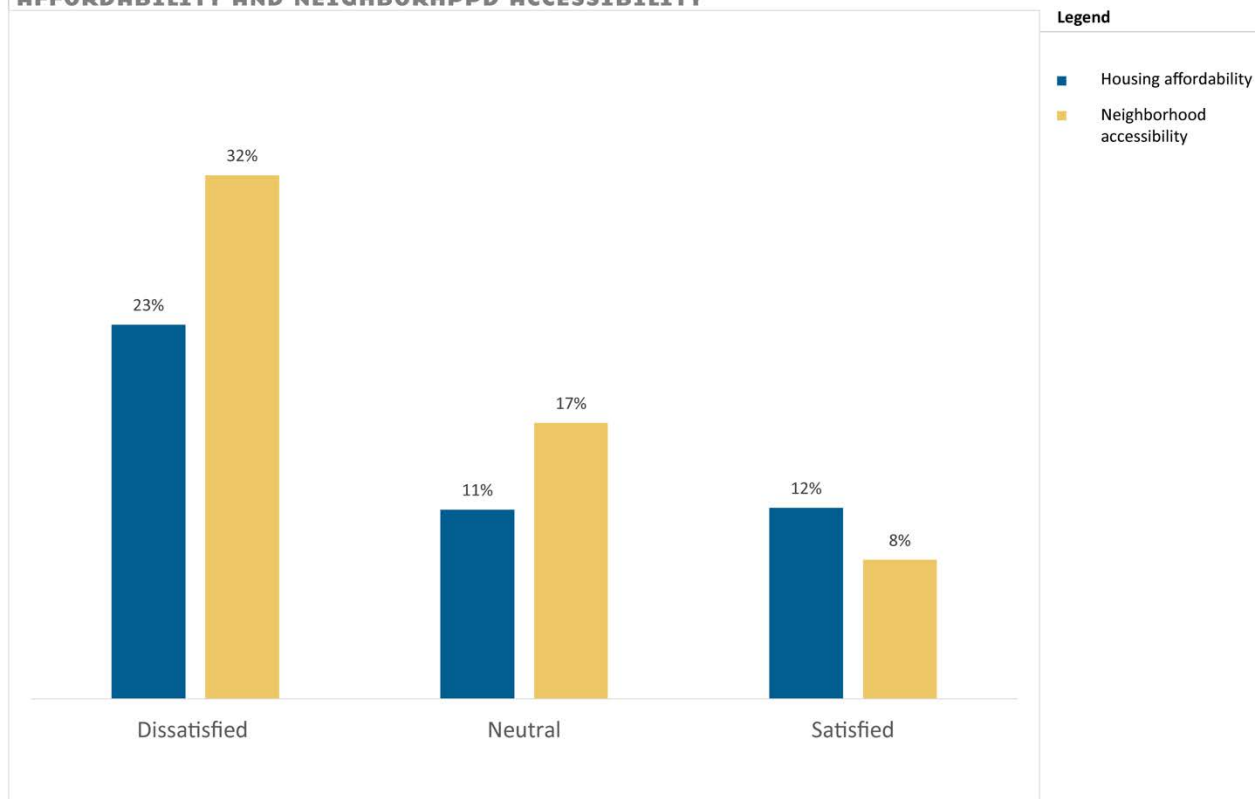
Change in social and mental well-being scores refers to percentage changes in well-being scores comparing those experiencing the listed secondary effects with those who did not have these experiences. Prevalence of decline in mental health associated with the listed secondary effects is indicated by percentage point increase for respondents reporting worse mental health among those who experienced the secondary effects compared with those who did not.

The most important secondary effects that were associated with declining mental health seem to be reduced physical activity and reduced access to nutritious food. Reduced access to public transit, increased family conflict or domestic violence, and reduced access to various services were also associated with higher incidences of worsened mental health. People experiencing reduced access to nutritious food, increased family conflict or domestic violence, reduced access to public transit and physical activity were also those who reported a poorer state of mental well-being, with overall mental well-being scores between 12% to 20% lower than their counterparts who did not experience these negative effects. Food insecurity also emerged as a challenge experienced by many multi-unit housing tenants in the recent survey conducted by the Hey Neighbour Collective (SFU Research Team & HNC, 2021).

Poorer social well-being was most likely to be impacted by reduced access to nutritious food – those with less access to nutrition during the pandemic had an overall social well-being score 17% lower than those who did not experience this challenge. While this result does not necessarily imply a causal relationship, it does point to the important

relationship between food security and well-being. Increased family tension and violence and increased screen time also negatively impacted people's social well-being. Interestingly, reduced social interactions did not seem to impact respondents' present state of mental and social well-being. However, this decline did contribute to reported mental health decline – there was a 15-percentage-point increase in number of respondents reporting worse mental health among those who reported reduced social interaction, in comparison to those who did not experience reduced social interaction.

PERCENTAGE OF REDUCED ACCESS TO NUTRITIOUS FOOD RELATED TO HOUSING AFFORDABILITY AND NEIGHBORHOOD ACCESSIBILITY

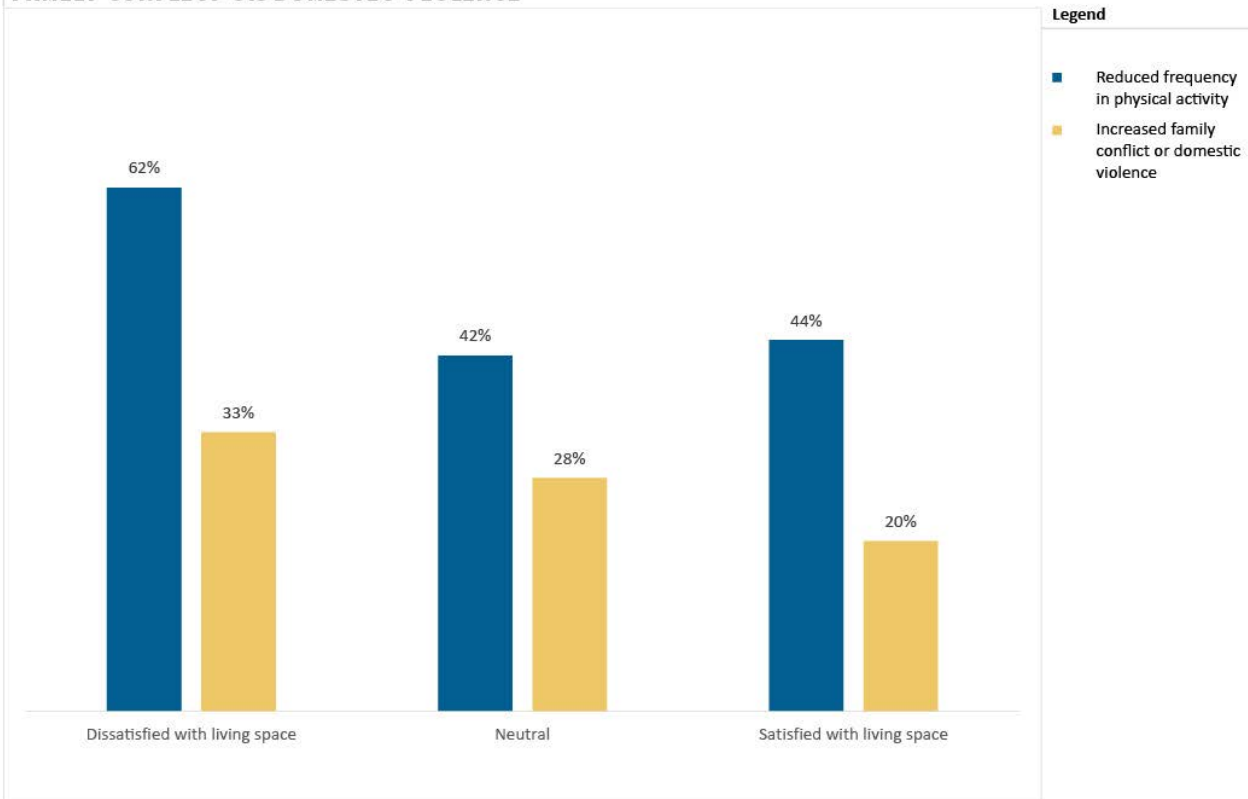


Note:

Housing affordability is satisfaction with current housing being affordable. Neighbourhood accessibility is assessed based on the average score (1-5) of satisfaction with neighborhood access to public transit, community programs, private and semi-private outdoor space, public open space or low-cost recreation spaces, shops, stores or markets to buy things for household needs, and childcare facilities or schools (dissatisfied: < 3; neutral: >=3 and <4; satisfied: >=4).

The secondary effects were further compounded by different housing situations. The incidences of reporting reduced access to nutritious food dropped significantly among residents who were satisfied with the affordability of their housing (by 11 percentage points) and among those who lived in locations with better neighbourhood accessibility (by 24 percentage points). Residents in more spacious units were less likely to report reduced physical activity (44%) than those in smaller units (62%). The former group was also less likely to experience intensified family conflict or domestic violence (20%) than the latter (33%).

DWELLING SPACE AND REDUCED PHYSICAL ACTIVITY FREQUENCY AND INCREASED FAMILY CONFLICT OR DOMESTIC VIOLENCE

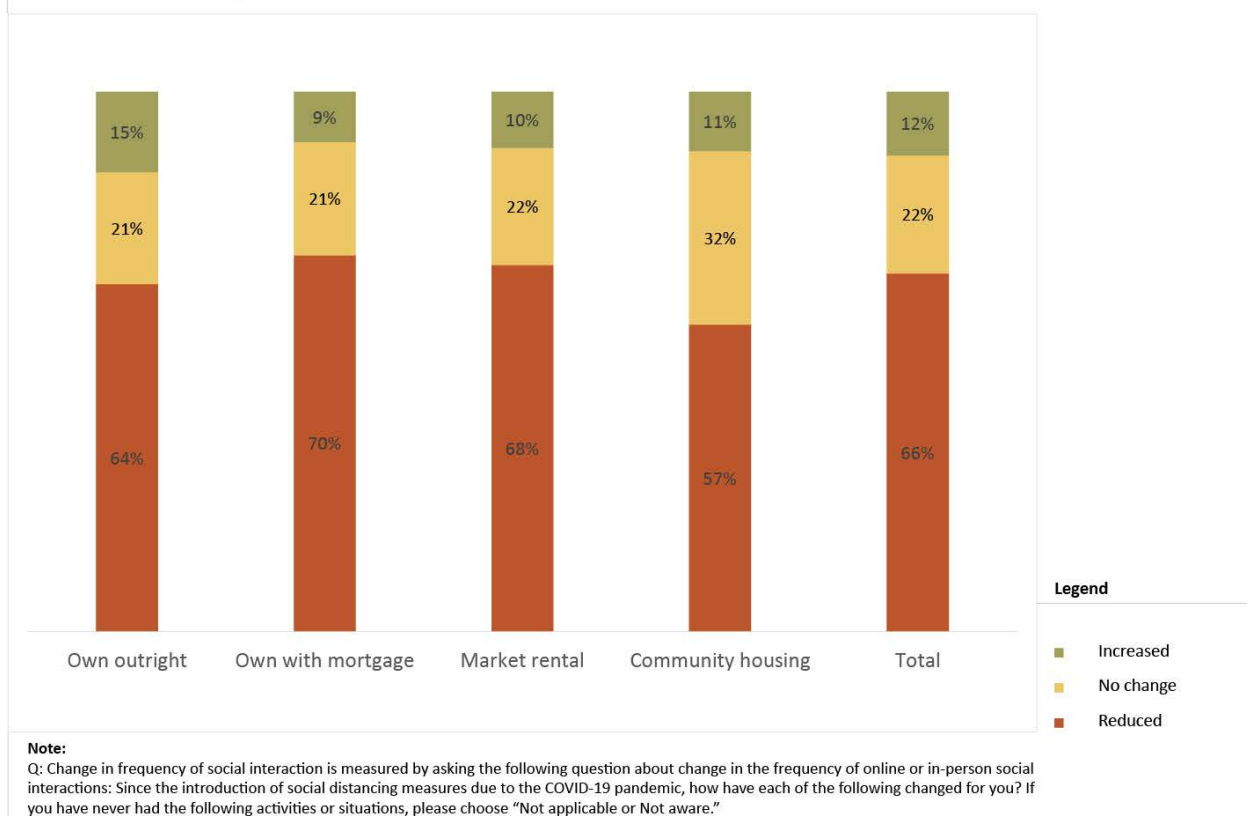


Note:

Dwelling space is satisfaction with the size of living space. (dissatisfied: < 3; neutral: >=3 and <4; satisfied: >=4).

Regarding social connections, community housing tenants were least likely (57%) to report reduced social interactions overall compared with residents in other tenures. More attention is needed to the role played by the efforts of community housing providers to support tenants in explaining this discrepancy (SFU Research Team & HNC, 2021). In contrast, homeowners with mortgage and market housing tenants faced the greatest disruptions to their social connections, with nearly 70% reporting reduced social interactions during the pandemic.

CHANGE IN FREQUENCY OF SOCIAL INTERACTION BY TENURE

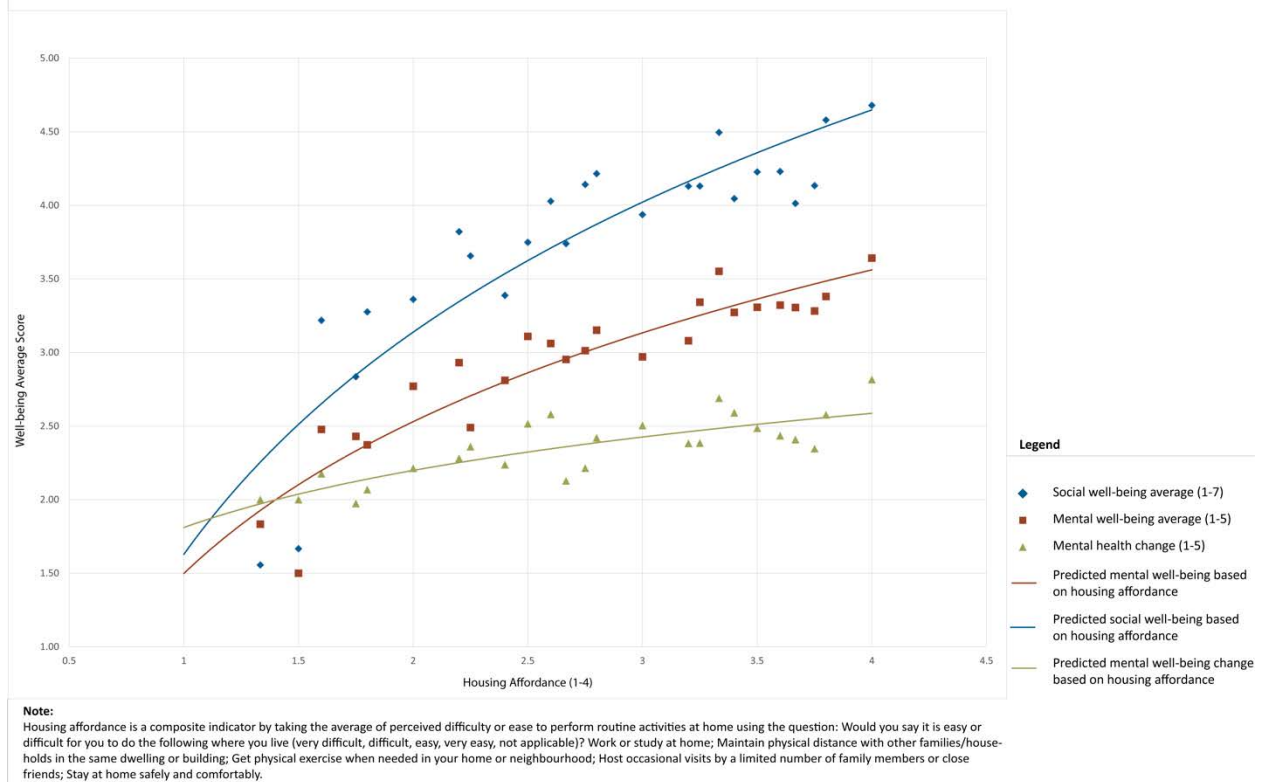


Housing vulnerability and well-being

More housing affordances support better well-being.

Because of the evident relationships between housing and secondary effects of COVID-19, housing affordances that allow individuals to stay at home safely and comfortably were important determinants of resident well-being at home during the pandemic. However, inversely, many residents faced housing constraints, including a lack of suitable work/study space, difficulty maintaining the recommended physical distance from other families or households, and limited space for physical activity, among others. To better demonstrate the relationship between housing affordances and well-being, we offer an index of housing affordances by taking the average perceived ease of performing various tasks at home (e.g., physical exercise, work/study at home, maintain physical distance with other households). As the graph below shows, housing affordances is a positive predictor of both social and mental well-being, indicated by the upward co-movement of housing affordances and well-being scores along the curves. The association between housing affordances and resilience against declining mental health is weaker, although still positive. The fewer constraints people face staying at home, the more likely we can expect well-being to be maintained during a pandemic or other emergency.

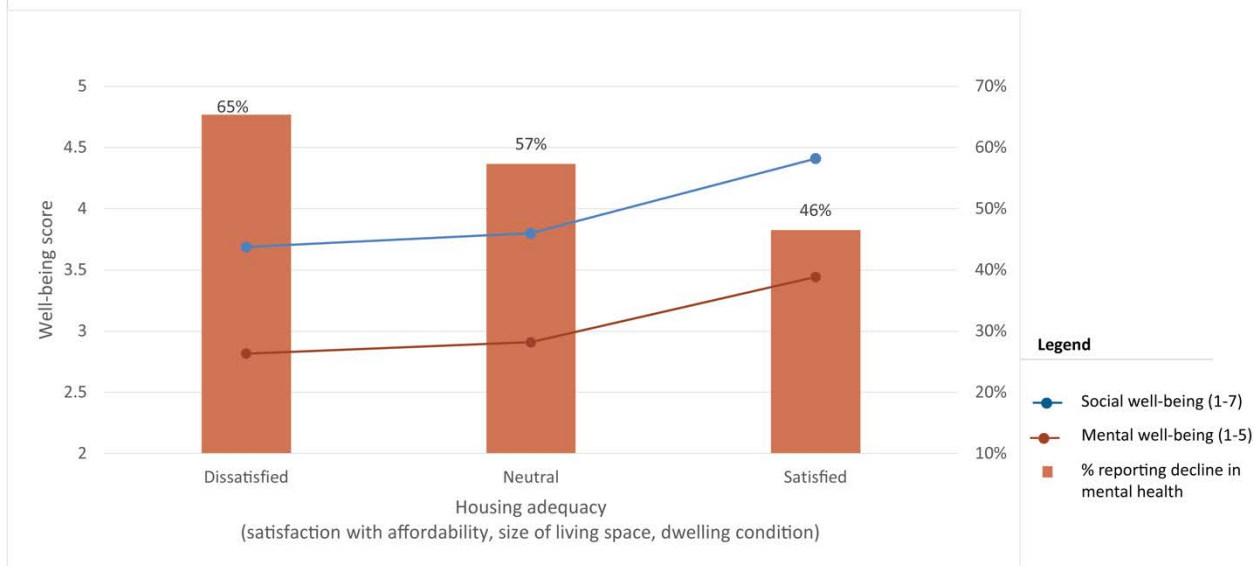
HOUSING AFFORDANCE AND WELL-BEING



Better housing adequacy, better well-being.

Other than influencing well-being through secondary effects pathways, housing adequacy – measured by core housing need indicators – can also directly impact mental and social well-being. Overall, residents who expressed a higher degree of satisfaction with their housing situation had better mental and social well-being. They were also less likely to experience deteriorating mental health when a new stressor like the COVID-19 pandemic emerged.

HOUSING ADEQUACY AND WELL-BEING

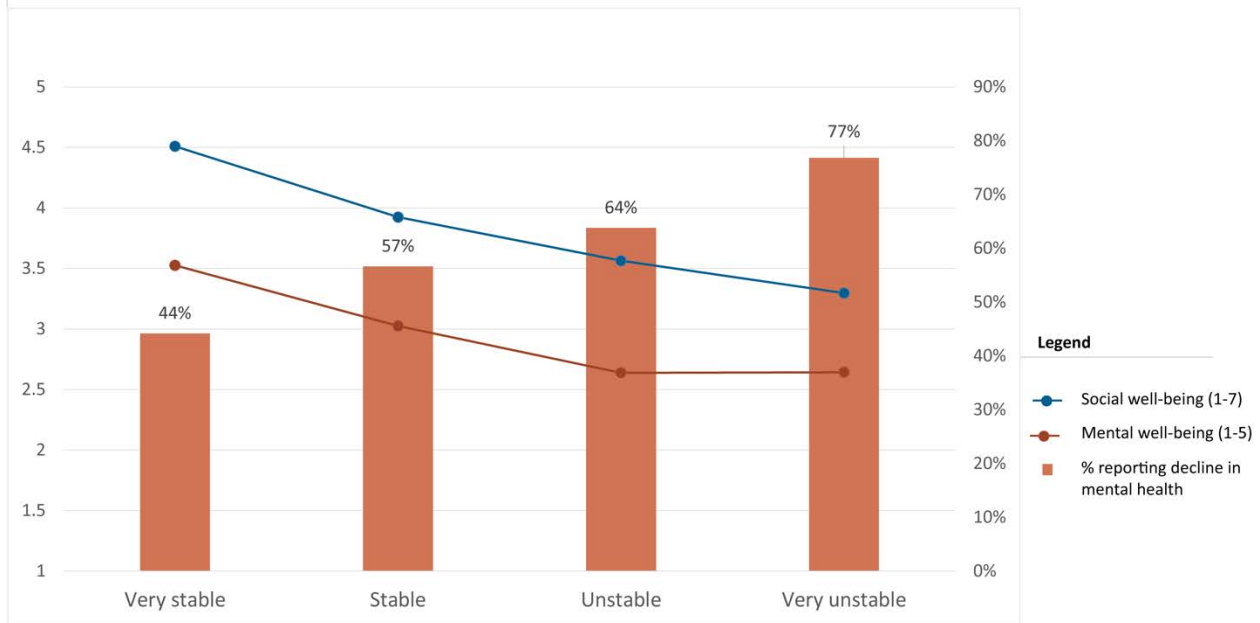


Note:
Housing adequacy is a composite indicator measured by the average score of satisfaction with affordability, size of living space and dwelling condition on a five-level scale; a score below 3 is classified as dissatisfied, a score between 3 (inclusive) and 4 is classified as neutral; a score equal to or greater than 4 is classified as satisfied.

Housing instability is associated with poor mental and social well-being.

Housing stability is a significant contributor to well-being. The social well-being score dropped by 27%, and mental well-being by 25%, for those in very unstable housing, compared with those in very stable situations. Unstable housing situations also contributed to mental health deterioration during the pandemic. Whereas 44% of those in very stable housing experienced worse mental health, this percentage jumped to 77% among those in very unstable housing. The strong relationship between housing stability and well-being is not surprising as other research has found that housing stability may reinforce a sense of life stability and allow people to develop stable social relations with others (Walsh et al., 2019).

HOUSING STABILITY AND WELL-BEING



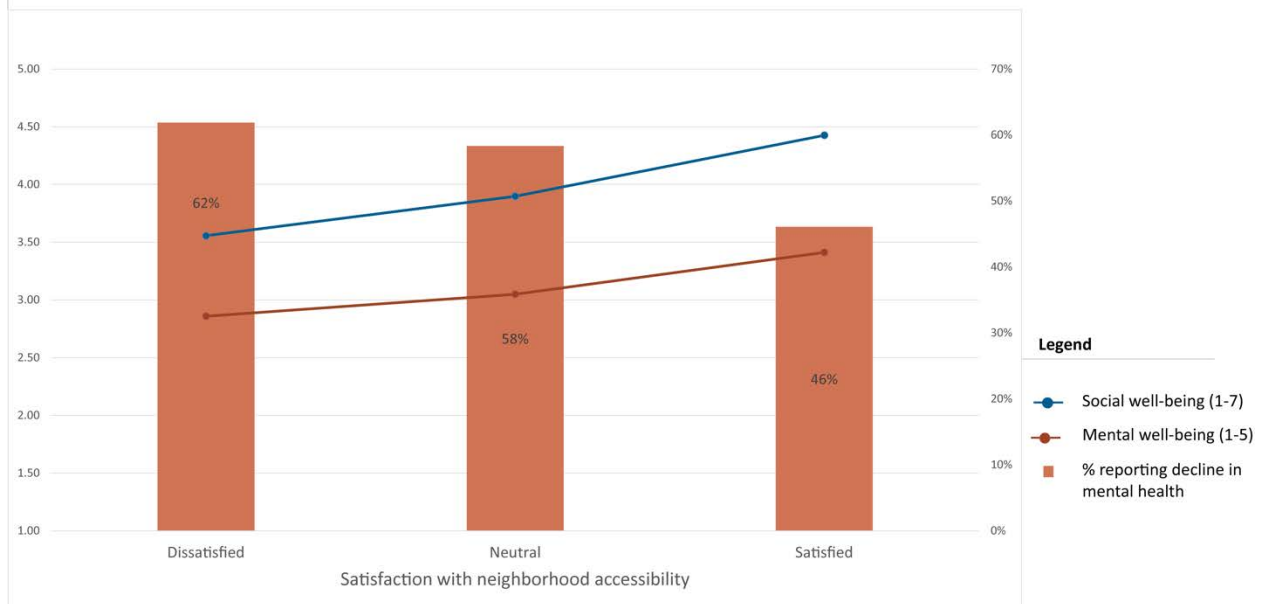
Note:

Q: How stable do you feel your current housing situation is?

Better neighbourhood accessibility contributes to better well-being.

Residents able to access more of the services and amenities they need in their neighbourhood can maintain better mental and social well-being. Those living in a neighbourhood where they could meet their daily needs were also less likely to experience mental health deterioration during the pandemic. These findings corroborate previous research indicating important neighbourhood effects of well-being outcomes (O'Campo et al., 2015).

NEIGHBORHOOD ACCESSIBILITY AND WELL-BEING



Note:

Neighbourhood accessibility is assessed based on the average score (1-5) of satisfaction with neighborhood access to public transit, community programs, private and semi-private outdoor space, public open space or low-cost recreation spaces, shops, stores or markets to buy things for household needs, and child care facilities or schools

Conclusion

Drawing on a survey of B.C. residents following the first year of the COVID-19 pandemic, this report unpacked multi-faceted housing vulnerability during the crisis and the relationships of multi-faceted vulnerability with well-being outcomes. It is clear from the results that the COVID-19 pandemic, including the secondary effects of public health measures put in place to limit mobility and restrict human contact, has had a negative impact on well-being. The absence of housing vulnerability plays a crucial role in mitigating the disruptive forces wrought by the public health crisis. Whereas home and neighbourhood became a haven from pandemic health threats for some, others faced new degrees of housing vulnerability, including decreased housing adequacy, stability, affordances and neighbourhood accessibility, all of which put strains on their ability to cope. Different housing tenure types made a significant difference in how these housing vulnerabilities were experienced. Key takeaways from this study are presented below.

The impacts of COVID-19 on the physical, mental, and social well-being of B.C. residents were widely felt.

Between 40% and 50% of survey respondents reported declines in physical and mental health one year into the pandemic. While overall reports of social well-being remained positive, British Columbians reported weaker senses of social integration (i.e., the sense of belonging and being valued) and social actualization (i.e., the sense of trust in other people and social institutions).

Housing vulnerability manifested in multiple ways.

Other than exacerbated unaffordability, overcrowding and sub-standard dwelling quality, which we term housing inadequacy, new forms of housing vulnerability manifested during the pandemic. We characterize and measure these functions of housing vulnerability as housing instability, limited housing affordances to stay safe and healthy at home, and reduced access to various amenities and resources within the home neighbourhood. Overall, the most prevalent housing adversities British Columbians faced were rising housing unaffordability and growing residential dissatisfaction. Slightly over 10% of respondents experienced housing instability during the pandemic. Regarding housing affordances, around one-fifth faced challenges at home to host occasional guests, to work or study, get physical exercise and to perform other daily activities at home or in the neighbourhood.

Market housing tenants were more likely than residents of other housing tenure types to experience housing vulnerability.

Tenants in market housing showed the lowest level of housing satisfaction, the highest rates of housing instability and involuntary relocation, and had the most difficulty

adhering to COVID-19 distancing measures. In contrast, community housing tenants fared better in many regards. Nevertheless, market and community housing tenants alike were overall worse off than homeowners. Constraints in the accessibility of key amenities and services in the home neighbourhood was not a vulnerability that showed up more significantly for any tenure type over any other, except that market housing tenants expressed more concerns about limited access to private outdoor space, which became especially important during the pandemic.

Strong relationships existed between housing situations and well-being, demonstrating the central role of housing policy as part of an effective set of pandemic NPIs.

All domains of housing vulnerability that we considered (adequacy, stability, affordances, neighbourhood accessibility) contributed directly and indirectly to mental and social well-being during the pandemic. Housing tenure type is clearly part of the answer, as our results showed that community housing tenants experienced better well-being outcomes than market housing tenants. Community housing tenure might have provided protections against the most severe negative impacts of pandemic-related restrictions, while market housing tenants appeared to have borne the brunt of these.

Our findings reveal that housing vulnerability is manifested not only in the deprivation of affordable housing that is adequate in state of repair and sufficient in size for household needs, but also in deficiencies in housing stability, housing affordances and neighbourhood accessibility. All these domains proved important determinants of well-being outcomes. Notably, renters in the private market demonstrated unexpected housing vulnerability in this survey, faring worse in important ways than community housing tenants. This points to the need for greater attention to the keys to resilience and protections from housing vulnerability within community housing models, especially for those who cannot afford homeownership.

To date, much of the understanding of housing vulnerability has been informed by a resource-based approach (H. Taylor, 2020), which conceives of housing vulnerability as mainly the deprivation of material housing resources: bricks and mortar, square footage, and financing. As we discussed in our Year-1 report, the resource-based approach, while having the benefits of easy measurability and implementation, diverts policy attention away from recognizing the vital, social side of housing vulnerabilities (Zhu et al., 2021). This report shines a new light on the kinds of vulnerable housing situations and experiences that put people at risk of poor well-being outcomes when in a state of crisis such as the COVID-19 pandemic. Considering the multi-faceted nature of housing vulnerability, we argue on the basis of our survey results that the focus on reducing housing vulnerability should begin with the well-being experiences of housing, and that beginning from this starting point leads us to housing policy that pays attention not only to the adequacy of the material housing itself, but also to improved security of tenure, the things that our housing and neighbourhood allow us to accomplish within our daily lives, and our quality of life and well-being at home.

Future policy discussions will benefit from identifying specific negative well-being outcomes and associated risk factors tied to home and neighbourhood environments, with a view toward building long-term community resilience in the widening diversity of homes and communities in B.C. Without a holistic understanding of housing vulnerability and lacking adequate attention to understanding the lived and social realities of what it means to be safe and sound at home, our opportunities to address communities in crisis are diminished, and we lose crucial time and space to build well-being outcomes into our housing plans and policy.

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