Use of private and public greenspace by housing tenure during the COVID-19 pandemic

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CEYRIS

Access to outdoor space at home
Frequency of outdoor play
Satisfaction with outdoor space
Visits to public greenspace

4. Discussion

Access to outdoor space
Shared outdoor space
Access to outdoor space by socioeconomic status
Satisfaction with outdoor space
Use of public greenspace
  Differences in use of public greenspace
  Further research

5. Conclusion

Recommendations for future research
Recommendations for policy implementation
  Different population groups
  Informing policy implementation
  Housing for certain population groups
  Improved data
  Alternative solutions
  Work with partners

6. Appendix 1

References
About this report

This report was produced by PHS. It was produced in partnership with the MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, which is funded by the UK Medical Research Council (MRC) Places and Health Programme (MC_UU_00022/4) and the Chief Scientist Office (CSO) (SPHSU19).

The Environment and Spaces for Public Health Partnership Group

The report was prepared on behalf of the Public Health Environment and Spaces Partnership Group hosted by PHS. This group brings together partners from national and local government, the NHS, the third sector and academia. The group was established at the outset of the pandemic to:

- bring together evidence on how our responses to the COVID-19 pandemic have affected our environment and spaces and how people interact within these
- explain how this might impact on people’s health and wellbeing
- explain how this might impact on health inequalities
- inform national and local responses through policy and practice.

Contributors (on behalf of the Environment and Spaces for Public Health Partnership Group)

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Summary

Purpose

The purpose of this report was to look at whether there was different access to, and use of, private and public greenspace during the COVID-19 pandemic in relation to housing tenure.

What did we do?

This report summarises findings from two national surveys delivered at two different stages during the COVID-19 pandemic.

Findings about access to outdoor space and use of public greenspace for households living in different housing tenures are presented from the:

- third wave of a YouGov/University of Glasgow (UofG) survey
- third round of the Public Health Scotland (PHS) COVID-19 Early Years Resilience and Impact Survey (CEYRIS)

What did we find?

- Most homeowners had access to their own private outdoor space at home, which the majority defined as a garden.

- Fewer private renters and social housing tenants had any outdoor space at home compared to homeowners and, where this was present, it tended not to be defined as a garden. In the YouGov/UofG survey, the highest proportion of respondents with no outdoor space were private renters.

- Most homeowners reported sole use of their outdoor space, while a higher proportion of respondents from other housing tenures tended to report this as shared space.
• Access to outdoor space at home varied by household income. In the YouGov/UofG survey, except for having a patio/terrace, only small differences were found in access to types of private outdoor space between high- and low-income households. In CEYRIS, a greater proportion of high-income households reported having access to a garden, patio, terrace or local greenspace compared to low-income households.

• Two-thirds of those who had access to a garden at home still accessed public greenspace.

• A high proportion of households with no access to outdoor space at home did not visit public greenspaces.

• A much smaller proportion of social housing tenants used public greenspace compared to private renters or homeowners.

• A much smaller proportion of children or adults with a long-term health condition or disability visited public greenspace compared to children or adults without a health condition or disability.

• CEYRIS found most children had access to a private garden at home, however, this varied by household income and tenure.

• CEYRIS identified that a smaller percentage of children living in social housing played outside on any day in the previous week compared to children from homeowning or private rented households.

• CEYRIS found that homeowners reported greater satisfaction with their outside space compared to other housing tenures, with private renters generally reporting greater satisfaction compared to social housing tenants.

• CEYRIS found visits to local greenspace by children varied by household income, housing tenure and access to outside space at home. A higher percentage of children living in low-income households, social housing or with no access to outside space at home had not visited greenspace at all in the previous week compared to other groups.
What does this mean for policy and practice?

More research

There is a need to build on the findings and improve our understanding of the differing use of private and public green and open spaces by different population groups. This includes those who do not have access to open space at home, households with children and disabilities, and low-income households.

Minimum housing standards for private outdoor space

There is a need to consider the minimum standard of private outdoor space required for households from different population groups, and the factors that influence this standard, to maximise the benefits for the health and wellbeing of occupants.

Cross-sector action

Cross-sector action is required to increase the provision and use of high-quality public and private green and open spaces to reduce inequalities.

Planning and housing policy implementation should acknowledge the contribution of private and public greenspace to health and consider access to gardens and local high-quality greenspace for new and existing housing.
1. Introduction

Greenspace and health

Living or spending time in areas that are ‘greener’ is beneficial to health and wellbeing. Health outcomes associated with exposure to greenspace include lower heart rate, increased physical activity, improved mental health and lower mortality rates.\(^1\)\(^2\) Exposure to greenspace can also aid in recovery from illness and help with management of poor health.\(^3\)

Additionally, there is strong evidence that exposure to greenspace can have significant health benefits for children and young people. Access to greenspace is associated with improved mental wellbeing and overall health and enhanced cognitive development.\(^4\)

Inequalities in access to greenspace

Inequalities exist in the availability, quality; and accessibility of greenspace.\(^5\) This means that not all populations may benefit equally.

Enforced movement restrictions during the COVID-19 pandemic further highlighted the availability and accessibility of greenspace as an amenity for health and the potential for inequalities to be exacerbated. This was especially true for females and older individuals.\(^6\)

Given the association between greenspace and all-cause and cardiovascular mortality is strongest for those in the most deprived groups,\(^3\) there is potential for improved greenspace access and use to contribute to a reduction in health inequalities.
Purpose of this report

The report was prepared on behalf of the Public Health Environment and Spaces Partnership Group hosted by PHS. See the About this report section for more information about this group.

Knowledge is limited about the relationship between housing tenure and access to, and use of, private and public greenspace during the pandemic.

This report summarises findings regarding access to private or shared outdoor space, use of public greenspace for households living in different housing tenures and satisfaction with private outdoor space.

Housing tenure types referred to in this report are: homeowner, private rented sector tenants, and social housing tenants who rent from a housing association or local authority.

Source of findings

Findings are reported from the third wave of a YouGov/UofG outside space and COVID-19 survey of adults and from the third round of the PHS CEYRIS of parent or carers and their children.

Who this report is for

This report has relevance for those working in central and local government; local authorities; the NHS; academia; third sector and others involved in housing, the environment, and planning and policy implementation at a national and local level; as well as service providers in both the public and private sector.
2. Overview of surveys

YouGov/UofG outside space and COVID-19 survey

The outside space and COVID-19 survey asked respondents to recall their use of outdoor space during the COVID-19 pandemic. To date, there have been three surveys completed at different times.⁷

This report outlines findings from the third wave of the survey. The first two waves did not contain questions about housing, however the third wave was updated by PHS to include questions around housing tenure.

Respondents were asked about their housing tenure (homeowner, private renter, local authority tenant, or housing association tenant) and about the types of outdoor space they had at home (garden, balcony, patio/terrace, shared space or no outdoor space).

They were also asked if they had a health condition and asked if they had accessed public green or open space at any point in the last 4 weeks. A small proportion of respondents reported they had access to more than one type of outdoor space at home, for example, a balcony as well as a garden.

Survey data were collected from 29 to 30 April 2021. No COVID-19 movement restrictions were in place at the time of the survey.

The survey was a UK-wide survey of adults aged 18 years and over, based on 2,215 responses received to online questionnaires, with sample weights applied. Characteristics of survey respondents and detailed survey findings can be found in the most recent report.⁷
CEYRIS

PHS developed CEYRIS to help understand how children have been affected by the pandemic and the associated restrictions. To date, there have been three CEYRIS rounds conducted across different stages of the pandemic. This report outlines key findings from the third round of the survey.

Respondents were asked about their housing tenure (homeowner, private renter, local authority tenant or housing association tenant).

They were asked to identify one main type of outdoor space they had at home (garden, private balcony/patio/terrace, shared space or no outdoor space).

They were also asked about their satisfaction with this space, if a parent or child had a long-term condition, and how frequently their child had played outside or visited a park/public greenspace in the last week.

Survey data were collected from 16 September to 14 October 2021. No COVID-19 movement restrictions were in place at the time.

This survey was Scottish based, sampled parents or carers of children between the ages of 0 and 11 years and captured 5,895 responses to the online questionnaire. The survey was unweighted, so respondents are not representative of the wider population in Scotland.

Participants were asked to complete one survey per child. However, there are some instances where a participant filled out multiple surveys, which cannot be identified.

Most respondents were from urban areas and more respondents were from high-income households than low-income households.

Additional characteristics of survey respondents and detailed survey findings can be found in the most recent report, while results from the first and second rounds of the survey are shown in the Appendix for comparison.
3. Results

YouGov/UofG outside space and COVID-19 survey

Access to private outdoor space

As shown in Figure 1, access to private outdoor space differed by housing tenure.

The smallest proportion of respondents who did not have access to outdoor space at home (3%) and did not have access to a garden (11%) were homeowners. Compared to other housing tenures, a much smaller percentage of homeowners did not have sole use of their outdoor space (3%).

The greatest proportion of respondents with no outdoor space at all were private renters (23%) and, where they did have an outdoor space, a higher proportion (49%) stated that they had no access to a garden compared to other housing tenures.

Figure 1: Access to outdoor space by housing tenure (YouGov survey wave 3)
Visits to public greenspace

As shown in Figure 2, reported visits to a public green or open space in the previous 4 weeks differed by housing tenure.

A much higher proportion of social housing tenants (defined as local authority and housing association tenants) had not visited greenspace at least once in the last 4 weeks (45% and 48% respectively) compared to homeowners (28%) and private renters (30%). This is despite social housing tenants tending to have less access to an outdoor space or garden at home compared to homeowners (as we saw in Figure 1).

**Figure 2: Not visited public greenspace by housing tenure (YouGov survey wave 3)**
As shown in Figure 3, a higher proportion of people with health conditions and/or disabilities had not visited public greenspace compared to people with no conditions across most tenures.

The exception was for local authority tenants, where 50% of tenants with no conditions had not visited public greenspace at least once in the last 4 weeks compared to 40% of tenants with health conditions or disabilities.

**Figure 3: Not visited public greenspace by housing tenure and health status (YouGov survey wave 3)**
Use of private outdoor space

Of those who had access to a private outdoor space, 85% reported using this space for sitting or relaxing, 67% for gardening, 65% spending time with family, 50% enjoying nature or wildlife (outside) and 48% reported enjoying nature or wildlife from indoors.

The survey did not ask about motivations for using outdoor space, so it did not reveal whether tenure, having sole or shared outdoor space, or a health condition, influenced how households used their private/shared outdoor space.

Visits to public greenspace by private outdoor space

As shown in Figure 4, visits to public greenspace also varied by type of outdoor space at home.

A similar percentage of households with a balcony (24%) or access to a patio/terrace (25%) had not visited public greenspace in the last 4 weeks compared to those with no outdoor space at home (26%).

Having a garden did not prevent the occupants from visiting public greenspace, and only around one third of respondents who had their own garden had not visited public greenspace at least once during the previous 4 weeks.
Figure 4: Not visited public greenspace by type of outdoor space at home (YouGov survey wave 3)

Visits to public greenspace by respondents with health conditions or disabilities by type of private outdoor space

A greater proportion of those with health conditions or disabilities had not visited public greenspace compared to those with no conditions across all types of outdoor space at home.

The percentage of people with a health condition or disability who had not visited public greenspace in the last 4 weeks when they had a patio/terrace (28%), balcony (28%) or no outdoor space (29%) were similar. These percentages were smaller than was reported for those who had a garden (36%).
Access to outdoor space at home

As shown in Figure 5, access to outdoor space at home differed by housing tenure. The smallest proportion of respondents that identified as not having an outdoor space (1%) or not having access to a garden at their home (6%) were homeowners.

The smallest proportion of respondents that reported not having sole use of their outdoor space were homeowners (3%).

A greater percentage of private renters (27%) and local authority tenants (25%) had no access to a garden, while 15% of private renters and 16% of local authority tenants shared outdoor space.

Percentages of housing association tenants who did not have access to a garden (30%) and who shared outdoor space (20%) were greater than the other tenures.

Figure 5: Access to outdoor space by housing tenure (CEYRIS round 3)
**Frequency of outdoor play**

As shown in Figure 6, the percentage of respondents who reported their child had not played outside on any day (0 days) in the past week or had played outside on every day (7 days) in the past week differed by housing tenure.

A smaller proportion of children from homeowning households did not play outside at all in the last week (6%) compared to children from other household tenures, while a higher proportion of children from homeowning households played outside every day in the last week (29%) compared to children from other household tenures.

No clear differences were observed when comparing percentages for private renters or social housing tenants against each other.

**Figure 6: No outdoor play by housing tenure (CEYRIS round 3)**
Satisfaction with outdoor space

Respondents were asked how much they agreed with statements about their outdoor space. They were asked if their outdoor space was: big enough for their family to enjoy (Figure 7), somewhere they could relax (Figure 8), somewhere their child could play (Figure 9) and helpful for their family during the pandemic (Figure 10).

Homeowners reported the greatest satisfaction with their outdoor space in response to all these statements compared to other housing tenures. Homeowners reported over 90% satisfaction with each aspect of their outdoor space, except for being satisfied it is somewhere they can relax (83%).

Private renters also reported greater satisfaction compared to social housing tenants for all aspects of their outdoor space apart from being satisfied their outdoor space is somewhere their child can play (83% for private renters compared to 84% for local authority tenants).

Figure 7: Satisfaction with outdoor space (big enough for my family to enjoy) by housing tenure (CEYRIS round 3)
Figure 8: Satisfaction with outdoor space (somewhere I can relax) by housing tenure (CEYRIS round 3)
Figure 9: Satisfaction with outdoor space (somewhere my child can play) by housing tenure (CEYRIS round 3)

- **Homeowner**: 93% Agree/Strongly Agree, 5% Neither Agree or Disagree, 2% Disagree/Strongly Disagree
- **Private Renter**: 83% Agree/Strongly Agree, 12% Neither Agree or Disagree, 5% Disagree/Strongly Disagree
- **Local Authority Tenant**: 84% Agree/Strongly Agree, 12% Neither Agree or Disagree, 4% Disagree/Strongly Disagree
- **Housing Association Tenant**: 76% Agree/Strongly Agree, 18% Neither Agree or Disagree, 6% Disagree/Strongly Disagree

Figure 10: Satisfaction with outdoor space (helped my family during the pandemic) by housing tenure (CEYRIS round 3)

- **Homeowner**: 93% Agree/Strongly Agree, 4% Neither Agree or Disagree, 3% Disagree/Strongly Disagree
- **Private Renter**: 78% Agree/Strongly Agree, 11% Neither Agree or Disagree, 11% Disagree/Strongly Disagree
- **Local Authority Tenant**: 68% Agree/Strongly Agree, 17% Neither Agree or Disagree, 15% Disagree/Strongly Disagree
- **Housing Association Tenant**: 65% Agree/Strongly Agree, 16% Neither Agree or Disagree, 19% Disagree/Strongly Disagree
Visits to public greenspace

Table 1 presents the percentage of children who had not visited a park/greenspace at all in the previous week (0 days) or had visited a park/greenspace most days (at least 4 days) in the last week. This was separated by housing tenure, outdoor space at home, household income, if the child had a long-term condition or if the parent had a long-term condition.

A greater proportion of children whose parents lived in social housing, who had no access to outdoor space or who were from low-income households did not visit a local park/greenspace at all in the last week compared to children whose parents were homeowners/private renters, had access to some form of outdoor space or were from high-income households.

A higher proportion of parents reporting they or their child had a long-term condition did not visit a local park/greenspace at all in the last week compared to parents who reported neither they nor their child had a long-term condition.

A smaller proportion of children whose parents rented from a housing association (14%) or whose parents reported their child had a long-term condition (16%) visited a local park/greenspace most days in the last week compared to other tenures (around 20%) and children who did not have a long-term condition (around 20%).
Table 1: Frequency of visiting park/public greenspace in last week by different domains (CEYRIS round 3)

<table>
<thead>
<tr>
<th>Domain</th>
<th>No days (%)</th>
<th>4 or more days (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing tenure (homeowner)</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Housing tenure (private renter)</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Housing tenure (local authority tenant)</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>Housing tenure (housing association tenant)</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>Outdoor space at home (garden)</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Outdoor space at home (private patio/terrace)</td>
<td>26</td>
<td>19</td>
</tr>
<tr>
<td>Outdoor space at home (shared space)</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Outdoor space at home (no outdoor space)</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>High income</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Low income</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Child had long-term condition</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>Child had no long-term condition</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Parent had long-term condition</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>Parent had no long-term condition</td>
<td>18</td>
<td>21</td>
</tr>
</tbody>
</table>
4. Discussion

The findings highlight inequalities in access to private outdoor space at home, satisfaction with outdoor space at home and use of public greenspace between types of housing tenure.

Housing tenure is also associated with reported frequency of children playing outdoors and visits to a public park or greenspace.

Having access to appropriate outdoor space at home may have been a factor in protecting the health and wellbeing of families during the pandemic. Further findings are discussed in the following sections.

Access to outdoor space

In the YouGov/UofG survey, 5% of all respondents had no access to any outdoor space and in CEYRIS, 2% reported having no access to outdoor space. This contrasts with Office for National Statistics (ONS) figures which reported 13% of Scottish households had no access to a private or shared garden. However, households in the ONS figures may still have had access to other types of outdoor space, such as a balcony or patio, which may explain some of the differences with our findings.

Findings from both the YouGov/UofG survey and CEYRIS highlighted the association between housing tenure and access to private outdoor space. Only 3% of homeowners responding in the YouGov/UofG survey had no private outdoor space and 1% of homeowners in CEYRIS had no private outdoor space. This contrasts with respondents living in rented accommodation where 19% of social housing tenants sampled in the YouGov/UofG survey had no outdoor space, mirroring what was reported in CEYRIS (20%). The YouGov/UofG survey also reported that of all tenures, the highest proportion without any outdoor space were private renters (23%).
Research in England on the impact of housing design and place on social value and wellbeing during the pandemic concluded resilience starts with the home and its design.\textsuperscript{12}

The research recommended that all homes should have access to balconies, daylight and broadband, and recommended a statutory requirement for adequate levels of good quality green and amenity space for all new planning proposals is needed across the UK.\textsuperscript{12}

**Shared outdoor space**

Sharing outdoor space varied by housing tenure, with most homeowners not sharing their outdoor space. Both the YouGov/UofG survey and CEYRIS found only 3% of homeowners shared their outdoor space, whereas a higher proportion of private renters and social housing tenants shared their outdoor space.

In the 2011 Scottish Census, 36% of Scottish households lived in flats,\textsuperscript{13} where access to outdoor space is likely to be shared, compared with 12% that identified as living in a flat or a tenement/cottage flat in the YouGov/UofG survey. As a UK-wide representative survey, the YouGov/UofG findings may not reflect the nuances of private or shared outdoor greenspace access associated with traditional Scottish housing types (e.g. tenements, backcourts and backgreens) and so may underestimate shared outdoor space.

CEYRIS is a Scottish-only survey, but it did not ask about housing type. CEYRIS did find a difference in shared outdoor space by housing tenure, with 3% of homeowners, 15% of private renters and 18% of social housing tenants sharing a communal outdoor space. Although CEYRIS asked parents if they were satisfied their space was somewhere suitable for their child to play, neither the YouGov/UofG survey or CEYRIS produced findings about the suitability of shared outdoor spaces.

It is therefore unknown whether the quality and availability of communal space, and/or perceptions about its safety, influenced whether adults considered it suitable for their child to play there.
Access to outdoor space by socioeconomic status

Access to outdoor space generally varies by household income. CEYRIS found that only 5% of children from high-income households had no access to a garden compared to nearly 25% of children from low-income households. However, this may underestimate the gap in access to outdoor space between income groups as results were not weighted and the open recruitment approach resulted in fewer families from low-income households participating.

Conversely, except for having a patio/terrace, the YouGov/UofG survey found only small differences in access to types of private outdoor space between different levels of household income.

Further research is required to better understand what access to private outdoor space exists for low-income Scottish households. Addressing this question would be beneficial given that outdoor play, and simply spending time outdoors, is important for children’s health and development.

Building our understanding about the existence of inequal access to outdoor space might potentially contribute to learning how to mitigate for avoidable factors that result in a difference in development between children from different income groups.
Satisfaction with outdoor space

Most homeowners agreed with CEYRIS questions asking if they were satisfied with their outdoor space, namely if they agreed their outside space at home was big enough, somewhere they could relax, somewhere their child could play, and it helped their family during the pandemic.

A smaller proportion of tenants in private rented accommodation and social housing were satisfied with their available outdoor space. A greater proportion of homeowners had access to a private garden which might explain them being more positive about their outdoor space.

These findings support other research during the pandemic that found households with a private garden or terrace space were the most comfortable or satisfied, followed by those with a private balcony or shared garden, while those with no outdoor space were least comfortable with their home.¹⁴

Satisfaction, and the health and wellbeing benefits associated with each type of outdoor space, need to be better understood. This is because we do not know how or whether health and wellbeing benefits vary as a consequence of the type of outdoor space available at home. This includes understanding more about how the availability, quality and type of outdoor space meets the needs of households, the purpose for which outdoor space is used and how these impact on health and wellbeing.

Improved understanding about how individual characteristics of people within the household, such as age or health status, influences the requirement for, or satisfaction with, different types of outdoor space would also be of use.
Use of public greenspace

Outdoor space at home may be appropriate for some activities and not others. This could explain why both the YouGov/UofG survey and the CEYRIS found that roughly 66% of homeowners with gardens still chose to visit public greenspace.

Scottish Government research into the drivers of participation in the outdoors found that while mental health benefits were not the reason respondents had originally visited the outdoors, it was the reason they returned.\textsuperscript{15}

All three waves of the YouGov/UofG surveys found participants recognised the mental health benefits of visiting public greenspace, with an increase in visits to greenspace being reported between the first and second wave, and this being subsequently maintained.\textsuperscript{16}

Differences in use of public greenspace

The YouGov/UofG survey and CEYRIS found a smaller proportion of people from households with no outdoor space played outside, visited a park or visited a public greenspace compared to households that had access to shared/private outdoor space.

Research is needed to understand the reasons for these findings. These include exploring household, individual and social characteristics, and the quality, availability and accessibility of nearby public greenspace.

Findings from the YouGov/UofG survey show a smaller proportion of those living in social housing visited public greenspace and have access to private outdoor space. They also suggest a greater proportion of those with long-term health conditions live in social housing. While not always the case, it is also hypothesised that a greater proportion of social housing tenants and private renters may be people on lower incomes compared to those who are homeowners.

Compared to children from homeowning households, a smaller proportion of children who lived in private rented accommodation and social housing have played outside every day, while a greater proportion of children who lived in these types of housing
had not played outdoors on any day in the week before the survey. One possible explanation for these findings is a much greater proportion of homeowners had gardens enabling their children to play outside every day more easily. Another factor may be that availability of a private garden or access to an outdoor space at home appears to be lower for children from low-income households.

**Further research**

Neither the YouGov/UofG survey nor CEYRIS definitively identified whether it is housing tenure, income level, access to outdoor space at home, or parents or children having a health condition or disability that results in differential use of greenspace.

Further research is therefore needed to establish which of these factors results in less use of greenspace, and whether it is a combination of any of these factors that is the cause.

Having information about types of outdoor space, how this meets different needs, and any evidence of health benefits would help inform future local housing and planning decisions, and retrofitting of existing housing provision. This would inform the type of private outdoor space required and the implications for public outdoor space provision.
5. Conclusion

Evidence of the physical and mental health benefits of open spaces for adults and children is well understood. Experience over the last 2 years (2020 to 2022) has brought inequalities in access to greenspace into sharp focus. However, the impact of access to private outdoor space at home, particularly for specific population groups, is less well understood.

Findings from the YouGov/UofG survey and CEYRIS have contributed to this understanding. Those who have access to private outdoor space, also made use of public greenspace, suggesting these may provide different functions. Conversely, some of those living in housing without access to private greenspace, did not make use of public greenspaces. This has raised further research questions.

There is a need to improve our understanding of access to private and shared outdoor spaces, and the complex relationship with housing type, tenure, household income and health status. This includes the minimum standards of private outdoor space required and the relationship with access to public greenspaces.

Improving understanding of how these factors interact is essential to ensure future spatial planning and decisions about how housing maximises the health and wellbeing benefits of private outdoor space for occupants. This is needed to ensure it meets a range of needs, that it contributes to community and population wellbeing, and addresses inequality and health inequalities.
Recommendations for future research

- Understand what motivates and facilitates people to use their local greenspace and if those reasons vary for those with or without an outdoor space at their own home.

- Explore what people with a private and/or shared outdoor space use this for, variation in uses by socioeconomic status and the potential benefit for mental health of those uses.

- Understand how different types of private outdoor space (including shared space) provide health and wellbeing benefits. Also understand how the differences in the type, quality, quantity, and availability of outdoor space can meet the needs of different households including differences by housing tenure, health status, age and family composition.

- Understand the barriers and facilitators to using public greenspace for households of different incomes, households that rent privately or from a social landlord, and households where the parent or child has a health condition or disability.

- Understand the relationship between private outdoor space provision and barriers related to using public greenspace.

- Understand the minimum standards of private outdoor space required for households, and the factors that influence this to maximise the benefits for the health and wellbeing of occupants.

- Understand the interplay between housing density, including flatted and mixed-use developments and provision of sufficient private open space.
Recommendations for policy implementation

Different population groups

Public and private greenspace may benefit different population groups in different ways and this needs to be considered in decision-making about spatial planning and housing provision.

Informing policy implementation

Research findings should inform the development of the updated Housing for Varying Needs Standards, implementation of the Housing to 2040 policy route map, national guidance and practice examples to support implementation of National Planning Framework 4 (NPF4), Play Sufficiency Assessments and Open Space Strategies.

The Housing to 2040 policy route-map requires that private outdoor space should be provided for housing funded by the Affordable Housing Supply Programme. It is important that this commitment is implemented.

Strategic Housing Investment Plans could similarly require provision of private outdoor space for new affordable housing.

There is also an opportunity for Local Housing Strategies and local authority planning policies to extend this to all new housing.

Housing for certain population groups

Housing being developed or retrofitted for particular population groups, including households with children, those who are older, who are living with long-term conditions and/or who experience disability, should take particular account of the provision of private outdoor space to meet their needs.
Improved data

Data on housing tenure, housing type, Scottish Index of Multiple Deprivation, proportion of houses without access to outdoor space at home, and population health and demographic data could inform the assessment of current and future needs for the enhancement of existing, and provision of new, open spaces in local areas.

Alternative solutions

Where existing rented and social housing provision do not have private outdoor space, public sector and private housing providers could be encouraged and supported to seek alternative solutions and provision to meet the needs of residents and maximise their wellbeing.

This could include retrofitting gardens, providing access to nearby private greenspace (including shared communal spaces) and/or improved access to public greenspaces.

Suggested approaches could include the re-allocation of road space, re-purposing of amenity greenspace, remediation of nearby vacant or derelict land as quality greenspace (including garden space) and developing shared garden schemes.

These ‘solutions’ should particularly consider households with residents who are less likely to use public outdoor spaces and/or who may require assistance to do so, including children, older people, those who are living with long-term conditions and/or who experience disability.

Work with partners

Where applicable, housing providers should involve partners with responsibility for land uses, such as local authorities and the NHS, to deliver these interventions.
Table 2: Access to outdoor space at home (CEYRIS rounds 1, 2 and 3)

<table>
<thead>
<tr>
<th>Outdoor space at home</th>
<th>Round 1 (%)</th>
<th>Round 2 (%)</th>
<th>Round 3 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No outdoor space (all respondents)</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>No outdoor space (homeowners)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No outdoor space (private renters)</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>No outdoor space (social housing tenants)</td>
<td>9</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>No access to a garden (homeowners)</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>No access to a garden (private renters)</td>
<td>21</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>No access to a garden (social housing tenants)</td>
<td>28</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>Access to a balcony (homeowners)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Access to a balcony (private renters)</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Access to a balcony (social housing tenants)</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>No access to a garden (high-income)</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>No access to a garden (low-income)</td>
<td>22</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>No access to outdoor space (high-income)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No access to outdoor space (low-income)</td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Outdoor space at home</td>
<td>Round 1 (%)</td>
<td>Round 2 (%)</td>
<td>Round 3 (%)</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Access to shared outdoor space (homeowners)</td>
<td>10</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Access to shared outdoor space (private renters)</td>
<td>18</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Access to shared outdoor space (social housing tenants)</td>
<td>21</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Frequency of child playing outdoors</td>
<td>Round 1 (%)</td>
<td>Round 2 (%)</td>
<td>Round 3 (%)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Child had not played outside on any day in the past week (homeowners)</td>
<td>1</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Child had not played outside on any day in the past week (private renters)</td>
<td>2</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Child had not played outside on any day in the past week (social housing tenants)</td>
<td>5</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Child played outside every day in the past week (homeowners)</td>
<td>45</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td>Child played outside every day in the past week (private renters)</td>
<td>36</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td>Child played outside every day in the past week (social housing tenants)</td>
<td>33</td>
<td>11</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 4: Use of public greenspace (CEYRIS rounds 1, 2 and 3)

<table>
<thead>
<tr>
<th>Child’s use of public greenspace</th>
<th>Round 1 (%)</th>
<th>Round 2 (%)</th>
<th>Round 3 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (homeowners)</td>
<td>24</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (private renters)</td>
<td>30</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (social housing tenants)</td>
<td>42</td>
<td>47</td>
<td>32</td>
</tr>
<tr>
<td>Child visited park/public greenspace every day in the past week (garden at home)</td>
<td>12</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Child visited park/public greenspace every day in the past week (private balcony at home)</td>
<td>9</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Child visited park/public greenspace every day in the past week (patio/terrace at home)</td>
<td>11</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Child visited park/public greenspace every day in the past week (no outdoor space at home)</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Child visited park/public greenspace every day in the past week (shared space at home)</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (garden at home)</td>
<td>27</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Child's use of public greenspace</td>
<td>Round 1 (%)</td>
<td>Round 2 (%)</td>
<td>Round 3 (%)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (private balcony at home)</td>
<td>24</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (patio/terrace at home)</td>
<td>28</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (no outdoor space at home)</td>
<td>26</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (shared space at home)</td>
<td>-</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (low income)</td>
<td>36</td>
<td>43</td>
<td>27</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (high income)</td>
<td>21</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (child had long-term condition)</td>
<td>34</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (child had no long-term condition)</td>
<td>23</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (parent had long-term condition)</td>
<td>33</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>Child's use of public greenspace</td>
<td>Round 1 (%)</td>
<td>Round 2 (%)</td>
<td>Round 3 (%)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Child had not visited park/public greenspace on any day in the past week (parent had no long-term condition)</td>
<td>25</td>
<td>28</td>
<td>18</td>
</tr>
</tbody>
</table>
References


8 Public Health Scotland. Are the kids alright? Key messages from the third round of the Public Health Scotland COVID-19 Early Years Resilience and Impact Survey; 2022.


