The importance of nature to city living during the COVID-19 pandemic: Considerations and

goals from environmental psychology

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Abstract

The COVID-19 pandemic has produced an opportunity for urban planners, government decision-makers, health practitioners, and environmental psychologists to further understand human psychosocial wellbeing in cities. Given a growing base of evidence illustrating that interaction with nature positively affects mood and mental health, preserving access to green spaces in cities during this time of mandated social isolation should be considered imperative for as long as possible. This think-piece highlights that parks, community gardens, and other natural areas are essential to urban dwellers, especially if directives to physically distance from one another become longstanding or recurrent. Public decision-makers should aim to develop simple, relatively inexpensive strategies to augment the usability of nature in innovative ways that make it possible to enjoy them while respecting distance guidelines. Also discussed is the notion that a predominant goal for social scientists and urban practitioners during this crisis will be to learn how people view the ways in which public parks and wilder urban areas mitigate their response to worry, isolation, and an altered form of civic engagement. Research on the extent to which 'sense of place' changes for city dwellers during this global circumstance will be important for planners and social scientists alike.

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The corona virus disease 2019 (COVID-19) has affected public health and safety around the
world—and city planners, government decision-makers, health practitioners, and social scientists
are working to examine the multifactorial nature of how people think, feel, and behave under
isolated conditions (e.g., Van Bavel et al., 2020). An opportunity also exists to better understand
the attributes of urban living that associate with human psychosocial wellbeing during a public
health crisis—something that has not been fully explored, even after the severe acute respiratory
syndrome (SARS) outbreak in 26 countries in 2002 and 2003 (Sim & Chua, 2004; World Health
Organization, 2020). The relatively few studies focusing on the psychosocial ramifications of the
SARS emergency describe intense emotional responses from healthcare workers and community
members during the outbreak, and for months afterward (Maunder et al., 2003). Significant and
debilitating fear of contagion, feelings of stigmatization, loneliness, boredom, anger and anxiety,
as well as a sense of uncertainty were common emotional responses (Leung et al., 2003;
Maunder et al., 2003). These outcomes can be reasonably expected from the current pandemic
and are now beginning to emerge in an interdisciplinary body of literature (e.g., Yao et al.,
2020).

In 2020, the impact of COVID-19 on public health created a global circumstance that
continues to compel many individuals to stay at home and avoid close interaction with others.
Fear and uncertainty naturally accompany sudden directives from health authorities to
dramatically change our social lives and the ways in which we use our local city spaces.
Naturally, people often wish to be in the proximity of others as they combat pessimism and

distress. Thus, despite the authoritative guidelines put forward by government bodies in many cities to close or restrict access to parks and other natural spaces where people tend to gather in groups, these are, arguably, the very environments that should be explicitly communicated for use during this time, as long as physical distancing suggestions are observed.

This is because preserving public access to parks and natural areas in cities can allow people to maintain, at a safe and responsible distance, a sense of community threatened by the loss of other indoor social hubs, such as coffee shops and pubs, and to cope more easily with what is being asked of them with respect to physical restrictions. Environmental psychologists have known for some time that simply looking at nature can improve mood, and that exposure to natural environments can make the demands of urban life seem more manageable. Spending time in nature has been shown to reduce the human stress response and augment physical and mental health (Collado et al., 2017), and exposure to natural landscapes improves our emotional experience almost immediately (Neill et al., 2018). Being in contact with nature can also increase prosocial behaviors like generosity, helpfulness, and cooperation (Weinstein et al., 2009). Children who grow up near natural areas tend to engage in pro-environmental behavior (Cheng & Monroe, 2012) and spend time in nature as adults (Thompson et al., 2008). These eco-conscious outcomes of having access to nature across the life span seem to bring about a sense of connectedness to nature and foster attitudes of conservation and sustainability—important facets that ought not be overlooked during the COVID-19 crisis.

Although small-scale natural features that are often present in cities, such as street trees, lawns, green courtyards, and private gardens are undoubtedly important, they may not be visually or behaviourally accessible to everyone, depending on the location of a residence and the type of dwelling, such as a high-rise building without a yard or view of nature. Many types of

dedicated green spaces within cities, such as parks and community gardens, often afford the space and the social norms for spontaneous social contact and opportunities for relationship-formation between neighbours (Peters et al., 2010). Indeed, the *biophilia* hypothesis (see Wilson, 1984) would suggest that, through an innate love of nature, seeking out natural settings is a universal aspect in our lives, drawing our attention and interest while giving us a sense of pleasure and peace. When we live in buildings without accessible views or proximity to trees, grass, and other wild attributes, we tend to understand our problems to be more severe and less soluble compared to those who live in greener areas (Kuo, 2001). Findings like this are relevant to the current situation where a definitive end point to the stress involved with the pandemic does not yet exist.

Strengthening the intersections between environmental psychology, urban planning, and public health is perhaps now timelier than ever, and investigating how to utilize natural spaces in cities in order to mitigate some of the psychosocial ramifications of the present public health emergency involving loneliness, anxiety, and depression is undoubtedly prudent. Programs that target urban green spaces to offer therapeutic interventions for populations who are more vulnerable, such as youth, those who live with cognitive deficits, the elderly, and individuals experiencing post-traumatic stress disorder (among many others) could be expanded to help small groups from the general public who feel emotional stress and a need for social cohesion (Barton & Rogerson, 2017). Similarly, the framework of ecotherapy programs that center on horticulture, conservation techniques for native plants and animals, nature-based arts, and so on could be used to scaffold and extend communication strategies to the general public that nature exposure, in many forms and in a number of ways, can help alleviate some of the newfound pressures on mental health in the face of COVID-19. Additional community-based research can

be undertaken to understand (and perhaps counter) public considerations and assumptions about the disadvantages of using natural areas during times when fewer people are out in public. We know that a sense of naturally-occurring surveillance in open public places tends to improve perceptions of safety in urban areas, and that neighbourhoods with features that encourage walking rather than driving are often thought to be safer (Foster et al., 2015). City planners and social scientists may wish to ask residents through formal survey methodology or via online community forums about risk perception concerning public parks and natural areas during this unprecedented time.

Another immediate goal for social scientists, health researchers, and urban practitioners during (and directly after) this crisis will be to learn about how residents themselves understand the degree to which public parks and wilder urban areas mitigate their response to physical and psychological isolation. Evidence put forward by interdisciplinary research that includes qualitative and quantitative methods and variables germane to environmental psychology may serve to bolster arguments for city officials to leverage public dollars to augment existing green spaces in ways that afford and communicate their psychological benefits to residents more directly. One important and accessible variable to examine in urban dwellers may be the psychological construct of sense of place. Studies that explore whether the psychological construct of sense of place, and its three dimensions of place attachment, place identity, and place dependence (see Jorgensen & Stedman, 2001) have been altered by the recent barriers to using parts of one's city will be helpful for social scientists and planners, especially when understood with demographics in mind, such as income, number of children in the household, proximity to green space, and changes to employment status. It is possible that place attachment (the emotional bond we have to a place) will be not have been significantly altered at the

individual level—it may even be strengthened, as sometimes tends to occur after natural disasters and significant place loss (Brown & Perkins, 1992). Brown and Perkins (1992) note that for some types of disruptions to stable place attachments, perceived place loss can make way for a period of stress, followed by a "post-disruption phase" of coping before new attachments can be formed to place and space. Likely, the dimension of place dependence for a neighbourhood or community will be perceived to be lower if people can no longer use particular areas to achieve behavioural goals. However, it is possible that, depending on proximity, new place dependencies have formed for some people during the pandemic and are understood to be satisfactory—and are perhaps even missed when social restrictions are eased. Place identity may also be affected as people learn how to understand themselves in relation to places that have not been able to be utilized as expected or desired for lengthy periods of time. It will also be critical to examine how attitudes about nature in urban settings vary alongside objective data about usage that is likely being captured by social geographers and planners in major cities at this time. These data can be interpreted with respect to many types of human settlements that vary in size, landscape, climate, and social and cultural norms.

Given the growing base of evidence illustrating that physical interactions and emotional connections with nature positively and therapeutically affect our mood and psychological wellbeing, preserving access to green spaces in cities worldwide during times of mandated physical isolation should be considered imperative for as long as possible. City parks, community gardens, urban conservation areas, and other types of natural spaces will arguably become even more essential to urban dwellers if the directive to physically distance from one another becomes longstanding or recurrent. Municipal decision-makers play a role in developing simple, relatively inexpensive strategies to secure and augment the usability of nature in

innovative ways so that it is possible to enjoy these settings while respecting physical distance guidelines. Over time, it may be sensible to allocate funding and resources toward the development of additional natural environments in cities to support and satisfy populations that include those who can no longer reliably utilize indoor communal areas as a way of meeting their wellbeing needs in times of extreme stress and improbability.

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