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Living well in your local neighbourhood: the value of bumping and gathering places.

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Key concepts: social infrastructure, neighbourhood, wellbeing, walkability, third places, bumping and gathering places.

Highlights

- Social infrastructure often have a functional role but can also provide significance or meaning to local social interactions.
- Bumping and gathering places are valuable for the social interactions of people within a neighbourhood
- Seeing others is important for local conviviality especially for the young, the elderly, and people not in full time employment or who work alone and do not have access to a car.
- Walkable neighbourhoods increase the chance of seeing people who live near and contribute to weak ties that can promote wellbeing and a sense of belonging.
- Urban design can promote health and wellbeing through bumping and gathering places to enhance simple social interaction.

Abstract

Cities need places that contribute to quality of life, places that support social interaction. Wellbeing, specifically, community wellbeing, is influenced by where people live, the quality of place is important and who they connect with socially. Social interaction and connection can come from the routine involvement with others, the behavioural acts of seeing and being with others. This research consisted of 38 interviews of residents of Christchurch, New Zealand, in the years following the 2010-12 earthquakes. Residents were asked about the place they lived and their interactions within their community. The aim was to examine the role of neighbourhood in contributing to local social connections and networks that contribute to living well. Specifically, it focused on the role and importance of social infrastructure in facilitating less formal social interactions in local neighbourhoods. It found that neighbourhood gathering places and bumping spaces can provide benefit for living well. Social infrastructure, like libraries, parks, primary schools, and pubs are some of the places of neighbourhood that contributed to how well people can encounter others for social interaction. In addition, unplanned interactions were facilitated by the existence of bumping places, such as street furniture. The wellbeing value of such spaces needs to be acknowledged and factored into planning decisions, and local rules and regulations need to allow the development of such spaces.

1. Introduction

There is an increasing awareness of the impact of the built environment on mental health and wellbeing (Lund et al, 2018). Like many countries Aotearoa New Zealand has a range of housing types within its urban environment, a large proportion of which are car-dependent suburbs. One challenge is how to make the suburban places within our urban environments good places to live. There is growing research on the importance of social interactions within neighbourhoods and that these interactions can have a positive effect. Infrastructure of electricity, roads, sewerage, and water supply are all well recognised as essential services for health and economic outcomes. Not so well recognised is the value of social infrastructure (Klinenberg, 2018) the facilities and natural spaces that support social activities and interaction; the places where people encounter others. Yet, there have been suggestions that these informal interactions can be of significant importance (Sandstrom & Dunn, 2014). The aim of this paper is to examine the role and importance of social infrastructure in facilitating less formal social interactions within local neighbourhoods.

1.1 Wellbeing and Social Connections

Positive relationships with friends and family through to acquaintances have been demonstrated to be good for health and wellbeing (Lu et al., 2021). Significant research has shown that quality social interactions with family and friends have an affirming effect, and there is growing evidence of the importance of weak social interactions or ties that can occur within the daily routine of life (Sandstrom & Dunn, 2014). Sandstrom and Dunn (2014) examined the daily interactions of both weak and strong ties and found that weak ties also contribute to social and emotional wellbeing. People have a need to belong and when they do not have frequent social interactions with others this can have negative health outcomes (Baumeister & Leary, 1995).

Where people live is well understood to be a key determinant of health (Barton, 2009). The social and physical characteristics of neighbourhood are reasonably well established as influencing the health and wellbeing of residents (Macintyre et al., 2002; Diez Roux & Mair, 2010). Atkinson et al., (2020) explored the relationship between community wellbeing and individual or subjective wellbeing. Even though wellbeing has had significant policy and planning attention there is still much discussion on what it means. Lee and Kim (2015) state that community in relation to wellbeing is usefully understood as one that is geographically bounded, usually through a neighbourhood, the residents of a place. The main approach to understanding community wellbeing relates to the territorial definition from neighbourhood through to broader geographical regions (ONS, 2017).

Over the past decade public health, urban planning and transportation researchers have placed greater focus on understanding the association between place and health, and all describe the importance of attributes of the built environment to improve physical and mental health and wellbeing. Having quality local amenity is associated with increased physical activity (Witten et al., 2012) as well as social activity and mental wellbeing (Baum & Palmer, 2002; Cattell et al., 2008). Perez et al., (2020) completed a systematic review of the literature on neighbourhood community life and health. This provided evidence of a positive association among neighbourhood and population health outcomes including the importance of the local sociability domain through informal and formal social networks within the geographical area of a neighbourhood. Neighbourhoods are an important and meaningful context for many including the elderly (Gardner, 2011).

Research exploring the relationship between neighbourhood and health found the benefits of increased sociability and sense of community (Lund 2002). What underpins these neighbourhood

relationships is not often a focus. Each neighbourhood is different with unique characteristics, the shape and form of place including access to social infrastructure and amenity.

1.2 Social Infrastructure

Oldenburg (1999) was one of the first to use the term the third place; the places where people regularly and voluntarily meet outside of their home (the first place) and employment (second place). Jeffries et al., (2009) later listed third spaces; from the more formal church and gatherings to the informal local shops, markets, coffee shops and bars, as well as public and shared spaces like parks. Schools are second places for children but third places for caregivers and parents who might meet socially at the school gate (Witten et al., 2007) and are central to sustaining social cohesion within neighbourhoods (Kearns et al., 2009).

Building on the work of Oldenburg (1999) and Putnam (2000), Klinenberg (2018) discussed how these places and spaces are essential to create and support opportunities of social interaction and connections. He used the term social infrastructure, the places that create sociability but at the same time often perform other valuable functions such as libraries and parks. He added spaces such as footpaths and streets where people can have informal social interaction such as acknowledging those who pass by. Latham and Layton (2019) provide a comprehensive review of the concept of social infrastructure in relation to public space, sociality and encounter, and the politics around providing access. In all kinds of ways social infrastructure is what makes city life more liveable, it is about building the capacity for people to be able to gather, be social and interact, and carry out activities (Layton & Latham, 2021). Where this infrastructure is situated within local neighbourhoods is also important.

Walkability is a specific characteristic of neighbourhood that can influence social interaction. The layout of a neighbourhood is a significant contributor to walkability; walkable neighbourhoods score better on every measure of social capital (Leyden, 2003). Forsyth (2015) reviewed the definition and research on what is meant by walkability, the term is used in multiple ways. Walkability is often associated with safe and compact design, as a means for dealing with urban problems and as an outcome for exercise and sociability. The value of walkability here is as an outcome for enhancing social interaction through walking to local destinations. Jane Jacobs (1972:67) discussed the role and importance of streets and walking, the interactions among strangers help to build trust over time. Walking can contribute to having a sense of place. The bonding of people to place happens through the individual, collective and cultural processes, most notably in relation to social interaction (Hidalgo & Hernandez, 2001). Routine walking patterns can be important initiators of social encounters providing greater diversity of interaction with others (Middleton, 2011).

1.4 Research Aim

This research investigated the role of neighbourhood in contributing to local social connections and networks that contribute to living well. Specifically, it focuses on the role and importance of social infrastructure in facilitating less formal social interactions in local neighbourhoods.

2. Method

2.1 Study area

This study was based in Ōtautahi/Christchurch, Aotearoa/New Zealand's second largest city and the main urban centre for Canterbury and the South Island. Christchurch has a population of 378,480

(StatsNZ, 2020), but 489,000 (StatsNZ, 2020) live within commutable distance in an area known as greater Christchurch. Christchurch was planned on a grid pattern under the principles of Garden City movement that emphasised the need for urban areas to be connected to natural landscapes such as parks. The growth of Christchurch remained compact until WWII, when from the 1950's suburban housing centred on car use started to dominate. This urban form continued through ad-hoc developments up until greater Christchurch experienced a series of large damaging earthquakes in 2010 through to 2012. Now known as the Canterbury Earthquake Sequence 2010-2012 (CES), it started with a large 7.1 Mw earthquake on 4 September 2010 that caused significant damage (see Hobbs et al (2022) for a full city profile including the CES). A devastating aftershock on 22 February 2011 struck under the central city on a busy work day causing extreme ground shaking that resulted in death, injuries and major damage to the city. Over 90 percent of the cities housing stock was damaged and large residential areas were designated as uninhabitable. The February earthquake changed the city and everyone was affected in some way.

In this study, suburbs were selected based on a review of local government and CES reports completed three years after the earthquakes. This allowed suburbs that had been the focus of significant previous earthquake research to be excluded, these had many features in common, most were badly damaged, were geographically distinct, and either high or low decile. The deprivation decile reflects a continuum of least deprivation (1) to high (10) updated in NZDep2013 (Atkinson, Salmond, & Crampton, 2014). NZDep2013 combines census data relating to income, home ownership, employment, qualifications, family structure, housing, access to transport and communications. The four suburbs selected, Hoon Hay, Merivale, Opawa and Phillipstown, were well established (70-100 years old) and located between 2.5km and 5km from the central city. The suburbs have diverse housing types, street widths, traffic levels, levels of walkability and access to social infrastructure such as shops, schools, community facilities and natural environments and are reasonably 'typical' of Christchurch. Merivale is a mixed decile older suburb with older low-density and new medium housing and an established town centre. Phillipstown is an inner-city low decile suburb also with a mix of older low and newer medium density. Opawa is an older mid-decile suburb mostly with low density housing and a village centre, while Hoon Hay is mid to low decile with low density suburban housing built through the 1950's and 60's (more details about these areas can be found at Banwell, 2017, page 57). This research was not focused on suburb biographies but rather what was similar or different across them. Most participants continued to live in their suburbs while recovering from the broader city impacts of loss of amenity and infrastructure, and so features of good community were focal. The American sociologist Quarantelli (1998) noted that disasters provide a unique opportunity to analyse and test social theory. The CES provided an unplanned opening to better understand social interaction within neighbourhood. As Christchurch based researchers, we were insiders (Phillips et al 2008) and so able to interact, understand and acknowledge the difficulties. The earthquakes were the big story but the everyday negotiation through that time helped to unfold what was valued, it was a shared experience.

2.2 Data collection

The recruitment strategy aimed to capture insights into residents' experiences across diverse age and ethnic backgrounds. A critical realist approach was used as this allows the investigation of events or outcomes (Easton, 2010) and is suited to exploring the external and observable behaviours of people or systems as happened. Participants were recruited through contacts, door knocking and meeting on local streets. In total 38 people were interviewed ranging in age from early twenties to mid-eighties, with more females than males (24/14) participating. Participants were from a range of

socio-economic background, mostly of European origin, but including Māori and Pacifica. Five were not born in New Zealand and came from different ethnic backgrounds. Interviews were semi structured providing the opportunity to add to their narrative as needed. Participants were asked about where they live; their street, neighbourhood, suburb, what they like most or what they would like to be different; social and physical aspects of their neighbourhood, who they socialise with, where in their neighbourhood, and what local groups they belong to. They were also asked about neighbourhood shops and services and their importance, what use they made of parks and natural areas, and the role services and facilities provided by council play, such as public events, libraries, public spaces, and pools. Finally, they were asked what helps to identify their suburb and whether it is important to have a sense of place. The questions were open ended and allowed reflection and questioning; interviews lasted from 45 minutes to two hours. All interviews were fully transcribed verbatim then analysed in a thematic way to manage the qualitative output using QSR NVivo software. A memo framework summarised the themes, code classifications were developed, key themes rechecked, and early coding reviewed. The research received ethical approval from the University of Canterbury Human Ethics Committee (HEC 2014/153).

3. Results and discussion

Early in the research, the importance of home, the type of street, knowing and seeing neighbours and those who live nearby was revealed. Strong themes included the value of walkability to local places to meet family and friends and to see others. Many used the terms 'bumping' and 'gathering' spaces and places as part of their understanding of importance to building social connections.

3.1 The Home Place

When asked to describe where they live, all but one started with a description of their home and location. Most had strong attachment to home describing it as the place that grounds them, the centre of their physical lives, where they have structure and a sense of control. The stability of home and routine was emphasised as being critical to managing after each earthquake sequence. Those who had to temporarily leave damaged homes for repairs said moving to new houses and not knowing neighbours was unsettling.

The type of home was important to inner-city participants from Merivale and Phillipstown, who valued their older style house that faced the street, in reference to new homes one asked '*What happened to the front veranda where we used to sit and see people walking by?*' More than half those interviewed noted how new suburban homes had street facing garages and fences that pose a barrier, one said '*how can you be known if you drive into your garage?*' The prominence of garages and specifically automatic door openers was discussed in disparaging terms by twenty of those interviewed. One noted that '*People get into their cars and go to work and then come home, press the little button for their garage and go inside to their private spaces and never once turning around*'.

3.2 The Street

Participants described how their street influenced who they knew and strength of their neighbourhood social connections. Some street types such as a cul-de-sac, lane way or narrow older streets enabled residents to socialise and bump into neighbours as part of their daily routines. The two meandering urban rivers of Christchurch has resulted in many cul-de-sac streets, especially in Opawa. Participants in cul-de-sac streets described how neighbours had become good friends, '*the cul-de-sac has been great for us.*' Christchurch's historic large grid layout has also given rise to four

to eight homes built on back sections with a shared driveway or lane. Lanes aided the most intimate relationships as participants could see neighbours and are a place for children to play. One spoke of the culture of her driveway as *'family through a different way,'* another said, *'it's my mini community.'* The casual meeting of neighbours was valued. A participant who had previously lived on a lane described the interaction, *'we had seven close neighbours on our lane, plus we are dog walkers and would see them all the time, over many years of interaction and it built up over time, we had a relationship.'* After moving to a cul-de-sac he had less neighbourly interaction but said it was still better than living on a conventional street.

Older narrow streets found in Merivale slowed traffic and created a feeling of nearness, *'we live in the middle of a narrow street, it is a family street, and we know most people.'* Streets with less traffic meant participants walked more and bumped into their neighbours, *'you walk past so you know your neighbours, so I know most of the people.'* Streets were seen as valuable places for meeting friends, which at the same time enabled a social distance from the home, a cordial but not too personal interaction. Most interviewed found long or busy roads inhibited social interaction, *'having those long long streets are generally a barrier to connectedness.'* Another said, *'Our street is so wide, so we don't know each other.'* One who lives on an arterial road in Hoon Hay with high traffic volume and limited pedestrian crossings was surprised by how few people she knew on the other side, *'I do visit the old lady over the road, but most are on our side.... it does seem strange that we know those on our side more.'*

3.3 Walking to places to see and be with others

Walking around the neighbourhood was a strong driver for local connections, essential to this was having a place to walk to. One important place was a local centre, a group of shops, or a node such as a supermarket, a pub or church or school; places to meet. Some participants used the general term of meeting informally or of crossing paths, many referred to bumping into friends or acquaintances. In the suburbs of Merivale and Opawa most could identify the bumping places in their neighbourhood and that walking was key, *'because walking somewhere you see people and that is really important to us to see people and have that eye contact being human together.'* Walking meant they spoke with their neighbours, *'it can take a long time to get to the shops here unlike the places with fences and garages.'* Nearly all acknowledged that this unintentional meeting was important for their local social connections. One used the phrase: *'you see the world differently when you walk.'* Another described why walking is important *'I think that once people get into their car it is not local, of course you can drive to the end of your street and is local but...I don't stay within my suburb in my car – in some ways it is that attachment to place, whereas driving removes you from your place.'* This was reiterated by others, *'stuff needs to be within five- or ten-minutes walking distance, it doesn't matter if this is a park or open space... or a café all help.'* Three spoke of valuing the places where you need to look at the person coming towards you, the meeting and greeting in small spaces as you pass such as park tracks, street connections and river bridges *'you need to acknowledge who is crossing.'*

The value of unintentional meeting of locals was seen as helping them to manage following the earthquakes with few formal places to meet and encounter others, to socialise. Nearly all interviewed described their need to talk as part of being able to cope. Local places to meet allowed people to talk with others, and to access information and resources as needed. Most interviewed referenced new subdivisions without direction, two actively left new subdivisions to live in older, *'more friendly established areas.'* Twelve had to move temporarily to a new subdivision while their homes had earthquake repairs. All spoke of the focus on private space, with few places to walk to they did not see their neighbours. One interviewed at her workplace in a new subdivision said, *'if*

you look around here, they will have to drive everywhere.' Another who lived in a new subdivision for nine months while his house was repaired said, *'what a way to live'*, and he was happy to move back to his older inner-city suburb of Merivale with a centre and parks within walking distance.

3.4 Places to bump

Participants were aware of the local amenities or social infrastructure within their and neighbouring suburbs. These included parks, playgrounds, libraries, schools, supermarkets and sporting facilities like pools and sports fields. These familiar places to meet up were part of their established daily routines.

Primary schools were viewed by most as a central place for social interaction within their neighbourhood, *'they are so much a hub for communities'* and provide multiple benefits; for education and a place for parents and caregivers to bump daily. The closing and amalgamation of schools across Christchurch in 2013 due to earthquake damage (and a political decision) was discussed by half the participants, *'closing schools affects more than the school, it affects the whole community.'* Phillipstown School was closed, and participants spoke of their anger at this decision, *'the school was the only bumping place for Phillipstown... the Ministry did not see the school as a community hub or the importance of the community.'* The sound of children chattering on their way to school was valued by two elderly women in Phillipstown, and they lost a cherished part of their day. Locals then negotiated the use of the vacant school as a community space, *'we love the facilities and gathering there, the kids love it and it is a great place to get together and just spend a day in the community.'*

In parts of some suburbs bumping places were not so obvious, in Hoon Hay participants identified a seat that had been deliberately placed on the street verge for people to meet and talk. In Phillipstown participants described the deliberate placement of furniture at their local mall to support social interaction *'Eastgate mall is unlike other malls, it has chairs and couches where people can sit and chat, not like other malls, which is all about spend spend.'*

Parks and walkways through natural spaces were seen as valued social infrastructure. Parks were noted for collective interaction for sport, leisure, walking, running, and as bumping places. Parks allowed quiet reflection time alone *'my soul food, the natural place'*, all the while seeing and acknowledging others. Routine walking patterns from dog walkers were described as good at bumping into others, often walking their dogs at unstated but mutually agreed times. This was intentional bumping, *'I have a dog and I spend time in the park getting to know and talk to others there.'* Many started out as strangers but over time they spoke of becoming friends, *'with a dog it doesn't take long to know others.'* For one participant this provided social contact, *'I meet others with dogs, the bumping into people is so important, I think it is what I like and what I connect with.'*

3.5 Places to gather

Central for most participants were those places where people could gather, a social hub to connect. This was emphasised following the earthquakes when central city and some suburbs restaurants and local bars were either closed or demolished. Many spoke of the loss of places to gather and the loss of the routine of meeting friends and work colleagues; *'Yes, and silly things like the strip, like the rituals of Friday ... all those familiar things, our normal routines we did over the years.'*

Pubs as gathering places featured strongly across the case study suburbs, a local pub to meet friends, a centre of local conviviality and interaction. Three participants from Opawa noted their lack of a local pub *'we need a neighbourhood pub, see Heathcote has rebuilt theirs and it is the centre of*

the community.' The suburb of Heathcote lost its local pub in the September 2010 earthquake, the community centre after the February 2011 earthquake and then coffee shop after the June 2011 earthquake. In the absence of a place to meet the local vicar set up in the local church a 'bring your own' pub, as a place to gather. The church pub closed when the local pub was rebuilt; it had served its purpose. One part of Hoon Hay has walkable access to a pub, *'the pub is used well,'* in another part of this large suburb one said, *'there is nowhere to go close by, no pub or café.'* These were especially important for those who do not socialise within their place of employment, they provided the social connection not found through their employment, *'my husband he is a tradesman and doesn't socialise with anyone at work, so he has to socialise in our community.'*

4. Discussion and conclusion

Where people live is in part about the individual home but also the shared area around the neighbourhood. An important finding was the value of home. Blunt and Dowling (2006) describe how the scales of home, then street and neighbourhood all contribute to a sense of belonging. The type of street participants lived on was a key feature of how well neighbours interacted socially. Noticeable differences in relationships were recorded among participants living in different street types with close and cooperative behaviour described in cul-de-sacs and on shared lanes. Mayo (1979) also found greater levels of neighbouring in cul-de-sacs. The ability to bump into neighbours meant that many did not need to actively seek them out. This proximity was important to developing sociability and close cooperative behaviour. Brown and Werner (1985) noted that living in a cul-de-sac may not influence people to be more sociable with their neighbours but does facilitate the opportunity to be more sociable. As was found here, lanes and cul-de-sacs enable neighbours to meet and socialise without having enter each other's homes, to be sociable but not too intimate. Kingham et al., (2020) found similar results from research of a temporary street closure in Christchurch, with reduced traffic residents found it was easier to interact with neighbours.

Urban design approaches favour the grid pattern to provide more walkable neighbourhoods (Wood et al., 2008), however, few discuss the social value created by streets such as cul-de-sacs (Southworth & Ben-Joseph, 2004). Appleyard (1980) showed that the street can be a mediator between the wider community and the private world of home and family and that street width was important to perception of scale that influences neighbourhood movement and interaction. Similar work in New Zealand also found the nature of the street was a key determinant of social interaction (Wiki et al., 2018).

All those interviewed recognised and discussed the different types of local social activity. This activity ranged from seeing people who live nearby who acknowledge each other, the general chatter and talking with neighbours about the weather or common daily themes. Hooper et al., (2015) describes 'this seeing others' as providing a breeding ground for neighbourhood conviviality, opening the way for social connection. Most interviewed could identify the bumping places in their neighbourhood and suburb where the casual or informal encounters occur during the daily routine of life. Equally important for social activity was the purposeful meeting at a specified place, whether by routine or pre-arranged. Gathering places where people can actively plan to meet, the gathering and socialising outside of the home. Bumping places can also be gathering places but the latter offers a more intentional place to meet.

Oldenburg (1999) cites the symbolic importance of the third place as a marker of the health and vibrancy of a neighbourhood. Hickman (2013) also used Oldenburg's term third place, describing how bumping places fulfil a social as well as functional role, that these places can change attitudes and the behaviour of residents. Third places provide significance or meaning to social interaction. As

several interviewed said, that interaction could be as simple as a nod of acknowledgement and that could give social support when needed. Most participants described how they met others in their neighbourhood through children, through school, babysitting or community events, something well described by other researchers (Witten et al., 2007; Grannis, 2009). Primary schools were one of the most recognised places, even for those without children attending school. Schools frequently represent the heart or centre of a community, in the absence of a shared religion primary schools are important gathering places (Shirlaw, 2014).

Individually employed, women with young children, elderly people, and those not in fulltime employment were more active and intimate with their neighbourhoods. This is described and observed by others (Ivory et al., 2015), especially where low incomes and lack of a car restrict where residents can go outside of their neighbourhood (Diez Roux & Mair, 2010; Perchoux et al., 2014). In this study, participants in Phillipstown, a low-income suburb, did not travel much beyond the suburb boundaries especially if they did not drive, and most had family and friends close by. In contrast participants in the higher income suburbs of Merivale and Opawa with their greater mobility engaged in activities within their suburbs and across much of the city. The few interviewed who did not value local bumping and gathering places did not socialise locally and their children did or had not attended local schools.

Sandstrom and Dunn (2014) describe this seeing of others as weak ties. Evidence suggests that weak ties such as the daily acknowledging or seeing locals but involving low contact, low emotional intensity and intimacy can provide positive benefit. They state that weak ties promote wellbeing by contributing diversity to the social network, adding contacts or companionship across a range of contexts. These weak ties are key for wellbeing and to have feelings of belonging, and have also been found have a protective factor against specific diseases (Berkman, 1995; Cohen & Janicki, 2009). Granovetter (1973) was able to demonstrate that weak ties were also important for the dispersal of information across a social network, this was well demonstrated through the earthquakes to support recovery and that later flowed back into daily living.

The more walkable neighbourhoods increased the chance of seeing people who live near. This study like many, show walking can promote social interactions and help to direct and increase neighbourly contact (Leyden, 2003; Rogers et al., 2011). Similarly, participants found spending time in their neighbourhood contributed to feeling they belong and their sense of wellbeing (Rogers et al., 2011); local relationships have a positive impact on wellbeing (Fowler & Christakis, 2008; Helliwell & Wang, 2010). As was found here, the structure of a neighbourhood, and the nature of the physical environment plays a part in forming and maintaining social interactions that provide opportunity for healthier behaviours (Cattell et al., 2008).

Evidence is growing on the need for urban design that promotes health and well-being (Diez Roux & Mair, 2012; Braveman et al., 2011), with more focus on the broader aspects of where people live to help determine their choices and behaviour for health. Social behaviours such as being involved in local neighbourhood and knowing others locally are invaluable. This is pertinent given the increase in loneliness across a range of range groups (WHO, 2021; Twenge et al., 2021) and declining mental health and wellbeing (Patel et al, 2018), especially among younger people and increasingly under COVID-19 mobility restrictions (Lee et al, 2020). In Australia and New Zealand, the number of people living alone is growing (StatsNZ, 2015; Mackay, 2018), while in the UK men between 35 and 54 showed a higher risk of loneliness and social isolation (Arbes et al., 2014). Health and psychological problems have been shown to be greater among people who do not have attachments (Baumeister & Leary, 1995). Sandstrom and Dunn (2014) describe the positive effect of a simple interaction, even as something as simple as interacting with someone at a café, or chatting at a public bench. People

feel more connected when someone walking past does something as simple as make eye contact (Wesselmann, et al, 2012). Places that facilitate these often-unintentional interactions, such as bumping into each other, have a real place in the design of urban spaces.

This research broadened the understanding of the role and importance of social infrastructure in facilitating the less formal social interactions within local neighbourhoods. A potential limitation of this research was the selection of suburbs, although considerable effort was completed to identify different urban forms within the city. The missing element was a new subdivision more externally situated and with a much stronger design favouring the private space that is separated from the street. Hoon Hay is largely a car orientated 1960's suburb with limited access to social infrastructure and had different experiences of participants from the three other suburbs. Although those who had lived there for a long time many had strong local relationships often through children and school.

The Canterbury Earthquake Sequence 2010-12 disrupted life for well over 18 months helping residents to understand the value of their neighbourhoods, the social connections that their local social infrastructure provided. Social infrastructure provided the common ground that enabled meaningful and routine social interaction often through informal bumping spaces and gathering places. The wellbeing value of such spaces needs to be acknowledged and factored into neighbourhood planning decisions. Sometimes, the social infrastructure needed to facilitate social interactions can be relatively simple and low cost, such as a river side bench or street side basketball hoop. The challenge, therefore, is how to encourage creative ways of allowing and/or facilitating the growth of such gathering places and bumping spaces, given their contribution to wellbeing and making urban places more liveable.

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References

- Appleyard, D., 1980, 'Livable streets: Protected neighbourhoods?' *Annals of the American Academy of Political and Social Science* 451 1, 106-117. <https://doi.org/10.1177%2F000271628045100111>
- Arbes, V, Coulton, C., Boekel, C., 2014, Men's social connectedness. Report prepared for beyondblue. Sydney: beyondblue. <https://adelaidemensgroup.com.au/wp-content/uploads/bw0276-mens-social-connectedness-final.pdf>
- Atkinson, S., Bagnall, A.M., Corcoran, R., South, J., Curtis, S., 2020. Being well together: individual subjective and community wellbeing. *Journal of Happiness Studies*, 21, 5, 1903-1921. <https://doi.org/10.1007/s10902-019-00146-2>
- Banwell, K., 2017, Planning for resilient communities: and every other day: learning from the Canterbury 2010-2012 earthquake sequence. A thesis submitted for the degree of Doctor of Philosophy in Geography, University of Canterbury. <https://hdl.handle.net/10092/14608>
- Barton, H., 2009, Land use planning and health and well-being. *Land Use Policy* 26, S115-S123. <https://doi.org/10.1016/j.landusepol.2009.09.008>
- Baum, F., Palmer, C., 2002, 'Opportunity structures': urban landscape, social capital and health promotion in Australia. *Health Promotion International* 17, 4, 351-361. <https://doi.org/10.1093/heapro/17.4.351>

- Baumeister, R.F., Leary, M.R., 1995, The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin* 117, 3, 497-529. <https://pubmed.ncbi.nlm.nih.gov/7777651/>
- Berkman, L.F., 1995, The Role of Social Relations in Health Promotion. *Psychosomatic Medicine* 57, 3, 245-254. <https://psycnet.apa.org/doi/10.1097/00006842-199505000-00006>
- Blunt, A., Dowling, R. 2006. *Home (Key ideas in geography)*. Abingdon: Routledge.
- Braveman, P., Egerter, S., Williams, D., 2011, Annual Review of Public Health 32, 1, 381-398. <https://doi.org/10.1146/annurev-publhealth-031210-101218>
- Brown, B. B., Werner, C. M., 1985, Social Cohesiveness, Territoriality, and Holiday Decorations: The Influence of Cul-de-Sacs. *Environment and Behavior* 17, 5, 539-565. <https://doi.org/10.1177%2F0013916585175001>
- Cattell, V., Dines, N., Gesler, W., Curtis, S., 2008, Mingling, observing, and lingering: Everyday public spaces and their implications for well-being and social relations. *Health and Place* 14, 3, 544-561. <http://dx.doi.org/10.1016/j.healthplace.2007.10.007>
- Cohen, S., Janicki-Deverts, D., 2009, Can We Improve Our Physical Health by Altering Our Social Networks? *Perspectives on Psychological Science* 4, 4, 375-378. <https://doi.org/10.1111/j.1745-6924.2009.01141.x>
- Diez Roux, A.V., Mair C, 2010, Neighborhoods and health. *Annals of the New York Academy of Sciences* 1186, 125-145. <https://doi.org/10.1111/j.1749-6632.2009.05333.x>
- Easton, G. 2010. Critical realism in case study research. *Industrial Marketing Management*, 39, 1, 118-128. <http://dx.doi.org/10.1016/j.indmarman.2008.06.004>
- Forsyth, A., 2015. What is a walkable place? The walkability debate in urban design. *Urban design international* 20, 4, 274-292. <https://doi.org/10.1057/udi.2015.22>
- Fowler, J. H., Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. *BMJ* 337, a2338. <https://doi.org/10.1136/bmj.a2338>
- Gardner, P.J., 2011. Natural neighborhood networks—Important social networks in the lives of older adults aging in place. *Journal of aging studies* 25, 3, 263-271. <https://doi.org/10.1016/j.jaging.2011.03.007>
- Grannis, R., 2009, *From the ground up: Translating geography into community through neighbor networks*. Princeton University Press. <https://www.jstor.org/stable/j.ctt7sfcc>
- Granovetter, M., 1983, The strength of weak ties: A network theory revisited. *Sociological Theory* 1, 201-233. <https://doi.org/10.2307/202051>
- Helliwell, J. F., Wang, S., 2010, Trust and well-being. *International Journal of Wellbeing* 1, 1, 42-78. <https://doi.org/10.5502/ijw.v1i1.9>
- Hickman, P., 2013, “Third places” and social interaction in deprived neighbourhoods in Great Britain. *Journal of Housing and the Built Environment* 28, 221–236. <https://doi.org/10.1007/s10901-012-9306-5>
- Hidalgo, M. C., & Hernandez, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of environmental psychology*, 21, 3, 273-281. <https://doi.org/10.1006/jevpe.2001.0221>

- Hobbs, M., Ahuriri-Driscoll, A., Kingham, S., Wiki, J., Marek, L., Dionisio, M. R., Curl, A., Schluter, P., Banwell, K., Mackenbach, J. D. (2022). A city profile of Ōtautahi Christchurch. *Cities*, 121, 103481. <https://doi.org/10.1016/j.cities.2021.103481>
- Hooper, C., Ivory, V., Fougere, G., 2015, Childhood neighbourhoods as third places: developing durable skills and preferences that enhance wellbeing in adulthood. *Health and Place* 34, 34-45. <https://doi.org/10.1016/j.healthplace.2015.03.017>
- Ivory, V., Russell, M., Witten, K., Hooper, C.M., Pearce, J., Blakely, T., 2015, What shape is your neighbourhood? Investigating the micro geographies of physical activity. *Social Science & Medicine* 133, 313-321. <https://doi.org/10.1016/j.socscimed.2014.11.041>
- Jacobs, J., 1972. *The Death and Life of Great American Cities*. New York: Random House.
- Jeffries, L.W., Bracken, C.C., Jian G., Casey, M., 2009, The Impact of Third Places on Community Quality of Life. *Applied Research Quality Life* 4, 333. <https://doi.org/10.1007/s11482-009-9084-8>
- Kearns, R.A., Lewis, N., McCreanor, T., Witten, K., 2009. 'The status quo is not an option': Community impacts of school closure in South Taranaki, New Zealand. *Journal of Rural Studies*, 25, 1, 131-140. <https://doi.org/10.1016/j.jrurstud.2008.08.002>
- Kingham, S., Curl, A., Banwell, K., 2020, Streets for transport and health: The opportunity of a temporary road closure for neighbourhood connection, activity and wellbeing. *Journal of Transport and Health* 18, 100872. <https://doi.org/10.1016/j.jth.2020.100872>
- Klinenberg, E., 2018, *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life* Crown Publishing Group, New York, NY.
- Latham, A., Layton, J., 2019, Social infrastructure and the public life of cities: studying urban sociality and public spaces. *Geography Compass* 13, 7, 12444. <https://doi.org/10.1111/gec3.12444>
- Layton, J., Latham, A., 2021, Social infrastructure and public life – notes on Finsbury Park, London. *Urban Geography*. <https://doi.org/10.1080/02723638.2021.1934631>
- Lee, S.J., Kim, Y. Phillips, R. eds., 2015. *Community well-being and community development: Conceptions and applications*. Cham: Springer International Publishing.
- Lee, C.M., Cadigan, J.M., Rhew, I.C., 2020, Increases in Loneliness Among Young Adults During the COVID-19 Pandemic and Association With Increases in Mental Health Problems. *Journal of Adolescent Health* 67, 5, 714-717. <https://doi.org/10.1016/j.jadohealth.2020.08.009>
- Leyden, K. M., 2003, Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *American Journal of Public Health* 93, 9, 1546-1551. <https://doi.org/10.2105/AJPH.93.9.1546>
- Lu. P., Oh, J., Leahy, K.E., Chopik, W.J., 2021, Friendship Importance Around the World: Links to Cultural Factors, Health, and Well-Being. *Frontiers in Psychology* 11, 3568. <https://doi.org/10.3389/fpsyg.2020.570839>
- Lund, C., Brooke-Sumner, C., Baingana, F., Baron, E.C., Breuer, E., Chandra, P., Haushofer, J., Herrman, H., Jordans, M., Kieling, C., Medina-Mora, M.E., Morgan, E., Omigbodun, O., Tol, W., Patel, V., Saxena, S., 2018, Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *Lancet Psychiatry* 5, 4, 357-369. [https://doi.org/10.1016/S2215-0366\(18\)30060-9](https://doi.org/10.1016/S2215-0366(18)30060-9)
- Mackay, H., 2018, *Australia Reimagined: Towards a more compassionate, less anxious society*, Pan Macmillan Australia, ISBN 978-1-74353-482-3.

- Mayo, J.M., 1979, Effects of street forms on suburban neighboring behavior. *Environment and Behavior* 11, 3, 375-397. <https://doi.org/10.1177%2F0013916579113004>
- Macintyre, S., Ellaway, A., Cummins, S., 2002, Place effects on health: how can we conceptualise, operationalise and measure them? *Social Science and Medicine* 55, 1, 125-139. [https://doi.org/10.1016/S0277-9536\(01\)00214-3](https://doi.org/10.1016/S0277-9536(01)00214-3)
- Middleton J. 2011, 'I'm on autopilot, I just follow the route': Exploring the habits, routines and practices of everyday urban mobilities. *Environment and Planning A* 43, 12, 2857–2877. <https://doi.org/10.1068/a43600>
- Oldenburg, R., 1999, *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* (third ed.). Marlowe & Company, New York.
- ONS. (2017). Wellbeing reports. Office for National Statistics. Accessed October 2022. [Personal well-being in the UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton P., Unützer, J., 2018, The lancet commission on global mental health and sustainable development. *The Lancet* 392, 10157, 1553-1598. [http://dx.doi.org/10.1016/S0140-6736\(18\)31612-X](http://dx.doi.org/10.1016/S0140-6736(18)31612-X)
- Perchoux, C., Kestens, Y., Thomas, F., Van Hulst, A., Thierry, B., Chaix, B., 2014, Assessing patterns of spatial behaviour in health studies: Their socio-demographic determinants and associations with transportation modes (the Record Cohort Study). *Social Science & Medicine* 119, 64-73. <https://doi.org/10.1016/j.socscimed.2014.07.026>
- Pérez, E., Braën, C., Boyer, G., Mercille, G., Rehany, É., Deslauriers, V., Bilodeau, A. and Potvin, L., 2020. Neighbourhood community life and health: A systematic review of reviews. *Health & Place*, 61, 102238. <https://doi.org/10.1016/j.healthplace.2019.102238>
- Phillips, B., Neal, D., Wikle, T., Subanthore, A., Hyrapiet, S. (2008). Mass fatality management after the Indian Ocean tsunami. *Disaster Prevention and Management: An International Journal*, 17, 5, 681-697. <https://doi.org/10.1108/09653560810918685>
- Putnam, R. D., 2000, *Bowling alone: The collapse and revival of American community*. Simon and Schuster. <http://bowlingalone.com/>
- Quarantelli, E. 1998. *What is a disaster?: perspectives on the question*: Psychology Press.
- Rogers, S., Halstead, J., Gardner, K., & Carlson, C., 2011, Examining Walkability and Social Capital as Indicators of Quality of Life at the Municipal and Neighbourhood Scales. *Applied Research in Quality of Life* 6, 2, 201-213. <https://doi.org/10.1007/s11482-010-9132-4>
- Sandstrom, G.M., Dunn, E.W., 2014, Social Interactions and Well-Being: The Surprising Power of Weak Ties. *Personality and Social Psychology Bulletin* 40, 7, 910-922. <https://doi.org/10.1177%2F0146167214529799>
- Shirlaw, N., 2014, *Children and the Canterbury earthquakes*. Auckland: Child Poverty Action Group. <https://communityresearch.org.nz/children-and-the-canterbury-earthquakes-paper-from-the-child-poverty-action-group/>
- Southworth, M., Ben-Joseph, E., 2004, Reconsidering the cul-de-sac. *ACCESS Magazine* 1, 24. <https://www.accessmagazine.org/spring-2004/reconsidering-cul-de-sac/>
- Statistics New Zealand, 2015, Growth of one-person and two-person households driven by ageing population. <https://www.stats.govt.nz/news/growth-of-one-person-and-two-person-households-driven-by-ageing-population>

- Statistics New Zealand, 2020, 2018 Census place summaries, Stats NZ, Wellington.
<https://www.stats.govt.nz/tools/2018-census-place-summaries/>
- Twenge, J.M., Haidt, J., Blake, A.B., McAllister, C., Lemon, H., Le Roy, A., 2021, Worldwide increases in adolescent loneliness. *Journal of Adolescence* 93, 257-269.
<https://doi.org/10.1016/j.adolescence.2021.06.006>
- Wesselmann, E. D., Cardoso, F. D., Slater, S., Williams, K. D., 2012, To be looked at as though air: civil attention matters. *Psychol. Sci.* 23, 166–168. <https://doi.org/10.1177/0956797611427921>
- Witten, K., Blakely, T., Bagheri, N., Badland, H., Ivory, V., Pearce, J., Schofield G., 2012, Neighbourhood built environment and transport and leisure physical activity: findings using objective exposure and outcome measures in New Zealand. *Environmental Health Perspectives* 120, 7, 971. <https://doi.org/10.1289/ehp.1104584>
- Witten, K., McCreanor, T., Kearns, R., 2007, The place of schools in parents' community belonging. *New Zealand Geographer* 63, 2, 141-148. <https://doi.org/10.1111/j.1745-7939.2007.00097.x>
- WHO, 2021, Social isolation and loneliness among older people. WHO. Geneva.
<https://www.who.int/publications/i/item/9789240030749>
- Wiki, J., Kingham, S., Banwell, K., 2018, Re-working Appleyard in a low density environment: An exploration of the impacts of motorised traffic volume on street livability in Christchurch, New Zealand. *World Transport Policy and Practice* Volume 24, 1, 60-68.
<http://hdl.handle.net/10092/17651>
- Wood, L., Shannon, T., Bulsara, M., Pikora, T., McCormack, G., Giles-Corti, B., 2008, The anatomy of the safe and social suburb: An exploratory study of the built environment, social capital and residents' perceptions of safety. *Health and Place* 14, 1, 15-31.
<https://doi.org/10.1016/j.healthplace.2007.04.004>

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: