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Wellbeing in the city: Young adults' sense of loneliness and social connection in deprived urban neighbourhoods

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ABSTRACT

Neighbourhood characteristics can facilitate or hinder the development of social ties, thereby influencing the loneliness of those who live in them. Most research to date has focused upon how either older adults (65+) or youth (under 19 years old) view and experience their neighbourhood, paying little attention to young adults (aged 16-24). Young adults are the loneliest age-group within the UK and other Western countries. Their loneliness is associated with living in deprived communities (e.g., areas experiencing social-economic inequalities), feeling a strong sense of disconnection from their neighbourhoods and having little trust in others within these spaces. Therefore, this study utilises social representations theory to explore how young adults (18-24 years old) from London's four most deprived boroughs view and experience their neighbourhood using a systematic, qualitative methodology. In particular, the concept of dialogical antimonies, known as themata are used. A purposive sample of forty-eight participants was asked to write and/or draw where they felt loneliest and where they felt most socially connected in their neighbourhoods. These associations were then explored via an open-ended, exploratory interview. This revealed that the experience of neighbourhood was structured around four themata: 1) having no one to talk to/being disconnected from others vs. being with family or friends, 2) feeling bored/having nothing to do vs. having shared interests, goals or activities, 3) being in an unfamiliar environment vs. seeing familiar faces/having a sense of community, 4) busy vs. peaceful environment. On this basis, suggestions and implications for the design of wellbeing-enhancing neighbourhoods are discussed.

Introduction

Human health and wellbeing are not merely individual states; they are connected to wider social and environmental determinants. Urban wellbeing is a complex system, underpinned by a range of interrelated factors (Davies et al., 2021; Rydin et al., 2012). For instance, the air we breathe, the social networks we inhabit and the housing we live in all impact our health and wellbeing. In particular, there has been an increasing focus on the impact of the urban environment on our mental wellbeing, as studies have shown that the risk for mental illness is generally higher in urban environments compared to rural areas (see review by Gruebner et al., 2017). For example, urban populations report 39% more mood disorders, 21% more anxiety disorders and double as many cases of psychosis when compared to rural populations (Jacobi et al., 2014; Peen et al., 2010). Furthermore, city dwellers are twice as likely to be diagnosed with schizophrenia and have higher incidences of addictive disorders (Peen et al., 2010; Tonne et al., 2021).

While the role played by the urban environment in our wellbeing is recognised in the literature, there is a need to focus on specific contexts and groups since some people are lonelier than others (e.g., young adults aged between 16 and 24 years are the loneliest group), shown in largescale international surveys (e.g., Hammond et al., 2018). Wellbeing in this paper is defined as a multifaceted construct that encompasses the experience of positive emotions such as happiness and a lack of anxiety, as well as feelings of life satisfaction in combination with a sense that the things one does in life are worthwhile (Tinkler, 2015). The Five Ways to Wellbeing framework includes social connections as one of the five constituents of wellbeing along with 'be active', 'take notice', 'keep learning' and 'give' (New Economic Foundation, 2008). Since low socio-economic status, social segregation and low social capital are risk factors for mental health and wellbeing (Gruebner et al., 2017) representations of neighbourhood in areas of deprivation are likely to provide insight into the impacts of such environments on mental health and wellbeing. In addition, the neighbourhood context is important for

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young adults' wellbeing because young adults who experience a lower sense of belonging to their neighbourhood and have little trust of others in their local area report feeling lonely more often (Pyle and Evans, 2018). Thus loneliness and wellbeing overlap insofar as both contain a social connection element. Therefore, investigating how to make neighbourhoods more engaging and safe for young adults may aid their wellbeing and decrease their loneliness.

In addition to deprivation (e.g., areas experiencing social-economic inequalities), age plays a role in wellbeing. This is particularly so for loneliness. Loneliness has moved centre stage in contemporary times, especially in Western countries, where young adults, specifically those between the ages of 16 and 24 are the loneliest (e.g., Nemecek, 2020; DiJulio et al., 2018; Pyle and Evans, 2018; Payne, 2021; Ibbetson, 2019). Loneliness in young adults and deprivation are connected. In the UK, young adults living in the most deprived boroughs are most vulnerable to loneliness (Pyle and Evans, 2018). It is loneliness in young adults living in deprived boroughs that will form the focus of this paper.

Recent studies have explored the experience of loneliness in British young adults from some of the most deprived areas at the individual level and identified factors associated with the experience of loneliness: a sense of isolation despite being surrounded by people, a set of interrelated thoughts and feelings including overthinking, being bothered by one's thoughts and fear of being judged as well as different technological and non-technological coping mechanisms (e.g., Fardghassemi and Joffe, 2021). Although this study also found that lack of funding, lack of adequate transport and distance from desired amenities were associated with loneliness amongst some of the young adults living in deprived communities, there is limited understanding of how environmental characteristics such as the local built environment and neighbourhood design, i.e. the physical character of the neighbourhood, impact loneliness in young adults. Spatial characteristics within more deprived neighbourhoods may add to or mitigate feelings of loneliness for residents. Social relationships are embedded within and shaped by a social structural context including neighbourhood characteristics (Berkman et al., 2000). Loneliness may be impacted by the extent to which characteristics of a neighbourhood influence the social ties that develop between its residents (Matthews et al., 2019; Kearns et al., 2015b). Therefore, the present study explores young adults' experiences of their neighbourhood, in the four most deprived areas of London. We examine how their experiences of their neighbourhood are associated with their feelings of loneliness. This study took place during 2019, pre-pandemic, however the issues explored (i.e., social connectedness, loneliness, role of local neighbourhoods) came to the fore in the COVID-19 pandemic and are likely to remain centre stage in the years beyond it.

The built environment: neighbourhoods, social connections and social cohesion

A number of studies have found that social contacts, or the lack thereof, as well as social cohesion are crucial for wellbeing outcomes. Studies have shown that physical and psychological health benefit from stronger social networks and support in times of illness and stress. Social networks and support increase the sense of belonging and attachment to a place and feelings of empowerment in local areas (Hartig et al., 2014; Lovell et al., 2017).

Approached from a different perspective, the design and management of the built environment affects the social relationships that form within it. Jacobs (1961) and Lynch (1960, 1984) were instrumental in exploring spatial layouts and components that influence the prosperity of neighbourhood life: central points, clear flows in and out, places for people, a visual identity, shared open spaces and detailed design features. For instance, Jacobs advocated for mixed-use neighbourhoods to encourage 'eyes on the street', the concept that when there are more people engaging in a range of activities on the street this increases social cohesion and people's sense of security, ultimately creating safer neighbourhoods. For Jacobs (1961), Appleyard (1981) and Sennett

(1994) urban form and layout affect the possibility and nature of the encounters between people. Thus, connections between the design and management of the built environment and wellbeing have focused on increasing provision of public spaces for people to gather and meet, increasing interaction with community and neighbours, thereby fostering social cohesion.

Research exploring provision and access to urban open space has shown that people living in urban neighbourhoods with higher numbers of urban green spaces report lower levels of loneliness and higher social cohesion, indicating that green space can enable and improve social contacts in urban areas (Hartig et al., 2014; Navarrete-Hernandez and Laffan, 2019). Areas which people perceive to have low levels of walkability, safety and attachment are associated with higher levels of loneliness (Domenech-Abella et al., 2017; Kearns et al., 2015b; Kemperman et al., 2019; Wee et al., 2019; Yu et al., 2017). Collectively, these studies suggest that neighbourhood designs that are conducive to social contact, even if it is casual and fleeting, are beneficial in establishing social contacts and thereby reducing loneliness.

Healthy neighbourhoods and inclusive cities rely on spaces where people connect with others and access urban green spaces (Pineo, 2020; Watson, 2006). However, it might not be sufficient to 'provide' such spaces – provision does not guarantee usage. There is a need to understand what spaces and places mean to people, what qualities are valued, and what processes influence the formation of social contacts. Furthermore, both the private and public realms will impact upon wellbeing. There is considerable debate as to what is encompassed by the 'public' versus 'private' realm (Habermas, 1989). This paper focuses on the potential of the public realm as a place that can enhance wellbeing via facilitating the formation of social connectedness.

From the vantage point of urban social theorists, the formation of a neighbourhood involves a socio-psychological experience of a physical space. Massey (1994) argues that a person's development of a sense of place is an ongoing process in which social relations, interconnections and movements are formed. A neighbourhood is not merely a spatial area, it can also be a social area, depending upon how people use and feel about the built environment and the social connections they make. Neighbourhoods are often demarcated not only by geographical boundaries, but by the connections and relationships formed within them. Neighbourhoods have the potential to foster meaningful social connection amongst residents, create conditions of trust between neighbours and strengthen residents' sense of belonging. Socially connected neighbourhoods can play a key role in wellbeing. The likelihood of loneliness is reduced by regular contact with immediate neighbours and having people within one's neighbourhood whom one can rely on for emotional or practical support (e.g., Kearns et al., 2015a). Furthermore, social engagement and strong feelings of community attachment are associated with lower feelings of loneliness (Beech and Murray, 2013). Moreover, poor access to services and fear of crime along with low income are barriers to social connectedness in neighbourhoods; they are heightened in areas of multiple deprivation (Barnes et al., 2006). This stresses the co-evolution and interdependence of social and physical infrastructures, and how they impact our sense of loneliness.

Related to this, Amin (2007: 104) questions what is meant by 'the social' in the urban world; a world that increasingly builds nature, technology and the built environment into the human experience. Amin urges us 'to rethink the long-held assumptions that community is associated with spatial contiguity'. The familiarity of the everyday local and shared sense of place can potentially spark what Amin terms 'elective propinquity', but he argues that these propinquities are inflected by and additional to, other spaces of affiliation and obligation. Thus the city can be seen as 'the community of communities' (Amin 2007:109) being held together by a range of objects and connections. With these ideas in mind the city, or neighbourhood, is something that is not finished or bounded in space or time; far from being static it is constantly changing socially and physically. Thinking of the urban environment in this way will have implications for the concepts of community and neighbourhood- and the

co-evolution and interdependency between the social and physical infrastructures.

However, little is known about how neighbourhoods are experienced, from the perspectives of their residents, particularly those residents in the loneliest demographic: young adults living in deprived areas (e.g., Nemecek, 2020; DiJulio et al., 2018; Pyle and Evans, 2018; Payne, 2021; Ibbetson, 2019). This is pertinent especially because communication technologies have radically changed the sense of place; the public realm can be found in online spaces as much as physically on the ground for many in contemporary times, and young people have been shown to spend a significant portion of their waking lives in virtual spaces. As such, it is essential to understand how young adults, especially those from deprived urban communities, conceptualise their spatial and social environment, and how their neighbourhood might exacerbate, diminish or indeed have no effect on their experience of loneliness.

Young people and young adults' (16-24 years old) perceptions of loneliness and space

There is considerable work on how young people (i.e., those 18 years old and under) perceive neighbourhoods. This will be reviewed so that pointers can be found for the much less studied issue of young adults' (18–24 years old) conceptualisations of the link between their space and their loneliness.

Studies have investigated how adolescents conceptualise local places within their neighbourhood. The international research initiative Growing Up in Cities explored how adolescents from low socio-economic backgrounds used and perceived their local environment in eight international cities in the nineties: Buenos Aires, Melbourne, Northampton, Bangalore, Trondheim, Warsaw, Johannesburg, and Oakland (Chawla, 2002). For youths from these cities six features made a local neighbourhood superior, irrespective of cultural context: a feeling of social integration and acceptance; diverse, interesting activity settings; peer gathering places; a general sense of safety and freedom of movement; a cohesive community identity; and green areas for informal play and exploration as well as organised sports. There were also several qualities associated with alienation and dissatisfaction: social exclusion and stigma; boredom; fear of crime or harassment; heavy traffic; and uncollected rubbish and litter. Furthermore, racial and ethnic tensions dominated as did complaints about crime and environmental pollution. The project also showed that adolescents valued most a sense of security, acceptance and positive identity in their local environment where they could have the opportunity to socialise, play with friends and find interesting activities to partake in or observe. A further UK-based study of young people (9-16 years old) corroborated these findings (Matthews et al., 1999) but showing gender-based variation. It found that public spaces offer opportunities for socialisation as well as solitude and reflection but that girls were more than twice as likely to use the local public spaces for spending time with friends while boys were significantly more likely to use them to play sports.

Moving from the public to the private realm, for adolescents specifically, an ideal home is one that offers security, stability, quietness, privacy, comfort and warmth (Abbott-Chapman and Robertson, 1999). Other studies exploring adolescents' favourite places and associated activities within them have found that these spaces include adolescents' own home, own bedroom or the home of their close relatives or friends (Abbot-Chapman and Robertson, 2009). These were closely followed by places in nature such as at the beach or riverside. In terms of gender differences, for girls, one's own bedroom was chosen as a favourite space significantly more than for boys. Amongst the older adolescents, more females cited places in nature, and more males chose town facilities. The researchers put forward that as young people grow to maturity and become independent, they are more likely to transition the focus of their leisure activities from home to outside places such as to the local social hubs where they can spend time with friends. Reasons for choosing a favourite place were based on the activities, relationships and sensations associated with it. For example, one's home, bedroom or places in nature were associated with peacefulness, relaxation, freedom and privacy while friend's house or places in town provided an opportunity to see friends and play sports or computer games.

In particular, the bedroom is often regarded by young people as one of the first spaces over which they have a level of control, ownership, and privacy (Lincoln, 2015). For many youths, bedroom is a space of identity and biographical representation (Roberts, 2008).

Furthermore, media outlets such as music, television, film and literature provide youth with a range of resources from which their identities can be drawn. Music, in particular, is a common media outlet that many young people associate with in their bedrooms. Larson (1995) states that bedrooms are a place of refuge for many young people who want to be alone to explore their taste in music and avoid being judged by others for this. Recent advancements in new media technologies such as laptops, smartphones, iPods and other similar portable devices as well as the invention of social networking sites have infiltrated many young people's lives, and this has meant that they can spend more time in their bedrooms since they no longer need to share the family space to use media outlets such as a television or computer. Although many young adults spend a significant portion of their waking lives on social media, face-to-face interactions are crucial for holding loneliness at bay because they make it easier to develop feelings of belonging than online communications (Sacco and Ismail, 2014). The local neighbourhood can serve as a place where people can develop a strong sense of belonging through their social connections. This is especially important for certain sub-groups, like young individuals from lower socio-economic backgrounds, who may have limited resources for activities such as travel, entertainment, or participation in extracurricular activities. This can restrict their ability to engage in social interactions outside of their immediate area.

More recent studies in the UK examined how young adults engaged with their local area compared with those aged 25 and older (Pyle and Evans, 2018; Office for National Statistics, 2019). These studies found that young adults (16–24) are more likely than those aged 25 and older to feel they do not belong to their neighbourhood and do not trust many people within their neighbourhood. Interestingly, upon further examination, the study found that a lack of strong sense of belonging and having little trust of others living in one's neighbourhood were circumstances associated with higher levels of loneliness in young adults (16–24 years old) alongside other factors such as being in employment, worse off financially, as well as renting and living in the 50% most deprived areas (Pyle and Evans, 2018).

Other studies explored how Londoners, in particular (including 18-year-old young adults and those older), use and view the public realm (City, 2020). Prior to the Covid-19 pandemic, Londoners believed public spaces could create a sense of community and the opportunity to meet people. When asked about aesthetics and usability, respondents valued greenery and comfortable seating spaces that were clean and well-maintained for people to sit and relax. It was also important that there was variety in the types of spaces offered to create a diverse public realm for all the locals (e.g., high street, park, market, and community-led events such as live sports screening, music and art). Similarly, public amenities such as toilets, water fountains and CCTV cameras were identified as useful in enhancing convenience and safety. These offers can encourage greater use of the spaces and provide added value, including increasing social interaction and cohesion.

Theoretical input

It is evident from the existing literature that a) young people may lack engagement with their neighbourhood and b) people's experience of their neighbourhood can have an impact upon their sense of loneliness, since social ties are developed and shaped by larger social structural networks such as neighbourhood qualities (Berkman et al., 2000). A theory that allows one to study people's engagement with, and

experience of, entities is called for in order to study these connections in depth. Social representations theory provides an important theoretical framework with which to understand how people conceptualise entities (Moscovici, 1976, 2008). It has been used to explore phenomena such as what people want from cities of the future (see Joffe and Smith, 2016) and wellbeing more generally (see e.g., De Paola et al., 2020). Devised by the French social psychologist Moscovici, one key focus of the theory is on themata. Themata are the antimonies or dyadic oppositions that lie at the root of common sense and shape how people make sense of issues in the social world. For example, when making sense of Roma people, the antimonies nomadic/sedentary and pure/impure lie at the root of how this derogated group is conceptualised (Markova, 2015; Moscovici, 2011). Social representations of all entities are built upon an implicit dialogical base or polarised pair of concepts that underpin the representations people hold. Such themata structure the range of possible meanings concerning the particular entity. Since people engage with entities such as loneliness in a complex and multifaceted way (Joffe, 2003), the nuance of this engagement is best explored with a theoretical framework that foregrounds the dynamic link between implicit themata and the explicit representations that people convey in talking about

There is an absence of social representational work on the spaces people inhabit. Yet exploring the implicit and explicit content of young adults' representations of spaces might yield insight into the spatial determinants of their loneliness. This group are not only the loneliest group in the West, (e.g., Nemecek, 2020; DiJulio et al., 2018; Pyle and Evans, 2018; Payne, 2021; Ibbetson, 2019), but a group that experiences a strong lack of neighbourhood belonging and trust, characteristics associated with greater risk of loneliness (Pyle and Evans, 2018; Office for National Statistics, 2019).

Current study

As such, this study seeks to explore how young adults $(18-24\ years\ old)$ experience their neighbourhood and how these experiences may be linked with their sense of loneliness, or conversely, their sense of social connectedness.

The following research questions will be addressed:

- Which places do young adults living in London's most deprived areas consider to be the loneliest and which the most socially connected?
- What qualities and characteristics are associated with the loneliest and most socially connected places for young adults living in London's most deprived areas?

Methodology

Neighbourhood selection

Neighbourhood, in this study, was defined by geography. Participants were selected from the London boroughs of Newham, Hackney, Tower Hamlets and Barking & Dagenham. These boroughs are amongst the most deprived in London based on the Index of Multiple Deprivation (IMD), which combines seven domains to produce an overall relative measure of deprivation (Smith et al., 2015). The domains are income, employment, education, skills and training, health and disability, crime, barriers to housing services and living environment. The justification for choosing these boroughs comes from evidence that living in the 50% most deprived boroughs is associated with greater loneliness in young adults in the UK (The Pyle and Evans, 2018).

Participants

There were 48 participants recruited from the four most deprived areas of London by an agency between May 2019-August 2019. The sample was selected based on the Pyle and Evans (2018) findings on

Table 1Young adults' (18–24 years old) demographics (in numbers and percentages)^a.

Demographic categories	Male	<u>Female</u>	Other	<u>Total</u>
Boroughs				
Newham	6	5	1	12 (25%)
Hackney	5	7	-	12 (25%)
Tower Hamlets	7	5	_	12 (25%)
Barking & Dagenham	5	7	_	12 (25%)
Race				
White	6	9	_	15 (31.25%)
Black, Asian & Minority Ethic	17	15	1	33 (68.75%)
(BAME)				
Religion				
Christian	10	6	1	17 (37.5%)
Muslim	9	5	-	14 (29.17%)
No religion	5	7	-	12 (25%)
Other	3	0	_	3 (6.25%)
Prefer not to say	1	1	-	2 (4.17%)
<u>Total</u>	23	24	1	48 (100%)

^a The questionnaire about religion presented participants with a list of options including: 'Jewish', 'Buddhist', 'Hindu', 'Sikh', 'Christian', 'Muslim', 'No religion', 'I'd rather not say', and 'Other (please specify)'. Table 1 includes the options chosen by participants.

characteristics and qualities associated with greater loneliness: British (23 males, 24 females, and one 'other') young adults (M=21.23, SD=2.43), from lower socioeconomic backgrounds (C2DE) , ¹ in employment (either full- or part-time) and renting in the most deprived boroughs of London: Newham (N=12), Hackney (N=12), Tower Hamlets (N=12) and Barking & Dagenham (N=12) (Smith et al., 2015). Further demographic details are presented in Table 1.

Procedure

The recruitment company appointed a staff member to go to the four, identified geographic locations, in person. They recruited the participants by approaching those who appeared to fit into the categories required (18–24 years, with a balance across this age span and with a mix of males and females). They were then asked about the following to determine whether they fitted the required sample: socio-economic status, British-born, in employment, renting have at least one social media account, and living in Tower of Hamlets, Hackney, Barking & Dagenham or Newham.

Once individuals consented to take part, the recruitment agency arranged the interviews and handled a small cash incentive for participants. Participants were first presented with a consent form and information sheet, which informed them that the study explored young adults' social lives. They were kept blind to the specific aim of the study. Upon obtaining consent to be interviewed and audiotaped, they completed a free association task followed by the elaboration interviews. After the interview, demographic data were collected and participants fully debriefed. They were also given a list of professional services with contact details for further support in case the interviews evoked unwanted emotions. Finally, ethics permission was obtained from the researchers' university Research Ethics Committee (CEHP/ 2013/500).

Free association task and interview

This study used a free association technique to elicit data. The aim of free associations is to unveil what people think and feel about a phenomenon with little interference from the researcher. Compared to other

¹ This number represents the UK's social grade system based on occupation referring to those lower in social and economic status. It has been used by the Office for National Statistics in the UK, among other organisations (see IPSOS, 2009).

methods of data elicitation, free association offers a more naturalistic method of gaining access to people's conceptualisations. The Grid Elaboration method (GEM) was used: people are given a grid with boxes and asked to write or draw their first thoughts regarding the entity being studied (Joffe and Elsey, 2014). Participants were asked to write or draw one place in their neighbourhood where they feel most socially connected and one where they feel most lonely. Beneath each of the two places they were further instructed to write what it is about that place that makes them feel the way they do. Examples of this are presented in Fig. 1. Participants were then asked to elaborate on the content of the association they had produced in an interview. This began with "can we talk about what you've put in box one (for the most socially connected place), please?" Prompts including "can you tell me more about that?" and "how does that make you feel in this space?" were used to ensure respondents' thoughts and feelings about their chosen places were fully explored and emerged naturalistically without input from the researcher questioning. The same process ensued for the second box asking about the loneliest place. Each interview lasted between 20 and 30 min.

Data analysis

The results focus on the interviews rather than the initial free associations in the grids. These associations were the stimuli that participants elaborated in their interviews. A coding frame was developed to guide the thematic analysis that was performed on the interviews. Codes were inductive. Upon careful reading of the transcripts, any recurring patterns and key ideas were identified and turned into codes. This allowed codes to develop naturalistically and inductively from what was observed. The codes were then grouped into sets, which became the themes presented in the coding frame. Having defined and operationalised what content was to be coded under each code, reliability of the coding frame was tested by a second coder who was trained by the first coder to double-code just over 10% of the dataset on the computer package Atlas.ti. Inter-coder agreement analysis revealed an average Krippendorff's Cu-Alpha of 0.93 across all the codes, which indicates that an 'almost perfect' reliability had been achieved (Landis and Koch, 1977). Discrepancies were resolved following discussion between coders and codes adjusted accordingly. There is a current debate about whether thematic analyses should be assessed for reliability (O'Connor and Joffe, 2020; Braun and Clarke, 2021); the aim was to increase reliability, systematicity and transparency. Subsequently, the rest of the dataset was analysed using Atlas.ti 8.

Results

Interview themata

The following sections will outline the core themata that underpin the most prevalent themes found in young adults' elaborations of their own free associations concerning their loneliest and their most socially connected places within their neighbourhood. These themata reveal the dialogical and deep-rooted nature of young adults' views and experiences of their local public and private spaces. Four dyads are identified. They form the basis of how young adults from London's most deprived boroughs experience their neighbourhoods.

The themata focus on the qualities of the spaces, as conceptualised by the participants, not the spaces themselves. A list of the physical spaces mentioned by the participants as loneliness versus social connectedness enhancing is included in the supplementary material. Our findings indicate that a space, such as a park or home, had negative connotations for some, but positive for others. A summary of the four qualities (represented as dyads or themata) is included in Fig. 2.

The following section will outline the content of these themata, and their manifestations.

Thema 1. Relationships & Sociability: Being disconnected from others vs Being with family or friends.

The most prevalent themes in the interview data are underpinned by having no one to talk to or being disconnected from others vs. Being with family or friends. This manifests in the majority of the sample's experience of their neighbourhoods. At one level, many participants considered their home to be the loneliest place because they felt they had no one to talk to. Some lamented that the people they live with were either out, at work, or busy engaged with their own activities. A male participant shares his view of being home alone:

'I'd say, at home it does, can get kind of lonely because, again, everyone's just working, so it gets really difficult to see different family members when you're more, when you're more available...' (Non-binary, aged 18, BAME, Newham)

Similarly, others said that London's public transport, including tubes and buses, was the loneliest place because they felt a sense of disconnection from others in these forms of transport: although one is surrounded by a large number of people in these places, no one is talking to others. Everyone is caught up in their own lives and busy on their phones or social media without awareness of what is happening around them. A male participant expresses his view of the London underground through imagery:

"...The image I've drawn down the bottom is a train, and I drew four characters, three of which got their phones glued to their faces unaware of what's going on. And then the last face, it has no face, the emotion on his face basically, just portraying the disconnects from genuine interactiveness between each other and connection through emotions rather than interactions and connecting through phones and social media etc...." (Male, aged 24, White, Hackney)

While having no one to talk to or feeling disconnected from others was a major quality associated with the loneliest places within young adults' neighbourhoods, the major quality associated with feeling socially connected within their neighbourhood were relationships with family members and friends. For example, home was chosen to be the most socially connected place for some because it is where one is loved, most comfortable and can be oneself without the feeling of being judged:

'Alright, for the most socially place I wrote "home" because, of course, home is where the heart is. It's where your family is, it's where you're most loved...' (Male, aged 18, White, Barking & Dagenham)

Other places within the neighbourhood such as the local amenities including local pub, cinema, youth club, sports facilities as well as religious and educational institutions provided opportunities for young adults to meet and socialise with family and friends.

Thema 2. Activities and Use: Feeling bored or having nothing to do vs. having a shared interest, goal or activity

The second most important thema in the experience of neighbour-hood in terms of loneliness and social connectedness was feeling bored or having nothing to do vs. having a shared interest, goal or activity. Participants who spoke about their home or bedroom as the loneliest place stated they felt bored or had nothing to do there. In particular, one respondent said he finds nothing beneficial to do in his bedroom, and that even going on social media was of no benefit:

'...I feel like that is where I feel most lonely [in my bedroom]. Not only because there's not people there, because I'm not doing nothing to... to uh... to benefit myself. I'm not... sitting in your bed, just on your phone watching YouTube or on Instagram, that's not beneficial to you...' [Male, aged 19, White, Barking & Dagenham]

Some coped with their loneliness at home by watching TV even though a handful considered this activity to be boring. Others, especially young females used social media as a coping mechanism and tended to

 $^{^{2}}$ There were two parts to the study and the focus in this study is on the second one.

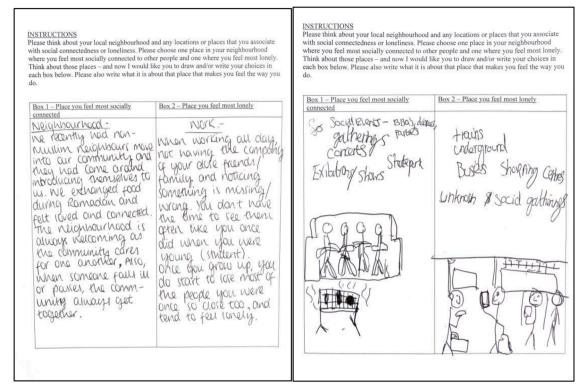


Fig. 1. Examples of completed free association grids.

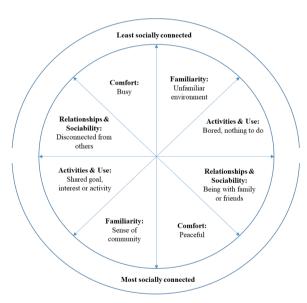


Fig. 2. Qualities of spaces and their social connectedness.

compare their own lives with those of others, which left them feeling sad.

However, a slightly larger number of the participants said the element of sharing the same interest, goal or activity brings them together to socialise and connect and places such as their workplace, college or the local amenities were identified to create these environments. For example, although educational institutions (e.g., school, college or university) were chosen as most lonely places by some, others considered them to be places where they felt most socially connected because they provided a space where young participants could be surrounded by those who share the same path, interests and goals. The following quote demonstrates this:

"...Workplace and college because both are student [vocation]. Erm... the college especially because we're all young people trying to learn the skills required to be a [vocation]. And also, again, because we all share that passion, I can click with them socially which is alright...' [Male, aged 18, White, Barking & Dagenham]

Furthermore, a number of the Muslim sample, in particular, said they felt most socially connected at a local mosque especially during the month of Ramadan when they fast because everyone comes together for the same spiritual purpose:

'So, as I've mentioned I'm Muslim and where I feel socially connected is when I go to the mosque, especially during Ramadan. We all have the same spiritual values, making sure, for example, making sure during Ramadan that we break our fast at the same time and it keeps you a sense of happiness and a sense of belongingness...' [Female, aged 22, BAME, Tower Hamlets]

Thema 3. Familiarity: Being in an unfamiliar environment vs. Seeing familiar faces and sense of community.

The third thema regarding why young adults experience loneliness and social connectedness in places within their neighbourhood revolves around the dyad of being in an unfamiliar environment vs. seeing familiar faces and sense of community. Although a number of the respondents expressed that being in an unfamiliar environment (e.g., being surrounded by strangers, not knowing anyone or what might happen) made them feel lonely, significantly more said seeing familiar faces and the community spirit created in their neighbourhood contributed to a sense of high levels of social connectedness.

At one level, places such as the park and London public transport were identified as the loneliest places because they were considered an unfamiliar environment, which involved being surrounded by strangers and not knowing anyone around one. Some were worried or anxious about something adverse happening to them in these places as

³ This detail was removed to ensure confidentiality.

demonstrated by a quote below about one's feeling on London's public transport, in particular: (see Fig. 3 for the corresponding output):

"... you're surrounded by a lot of people, but you're by yourself, in that literal sense that nobody is around me, and I get like really nervous, really anxious because I'm afraid I'm gonna miss my stop, and I get very lost, I'm gonna hurt myself like getting off the train for example. Like if I'm being clumsy, I might get my foot caught, hurt my back, or just something like that.....' [Female, aged 20, White, Barking & Dagenham]

At another level, educational institutions and workplaces were considered to be the loneliest spaces particularly at transitory stages when one moves from school or college to university or starts a new job as a graduate. These places were perceived to be new and unfamiliar environments because one does not know anyone, how to fit in or what to expect. One is also exposed to a different level of duties, responsibilities and lifestyle, that one is not used to. Participants lamented that nobody had informed them about the 'big jump' or how to prepare for the transition. A female participant expressed this sorrow about her transition to university below:

"...Nobody talks to you about that transition, how you are going to fit in etc., and I felt really lonely because obviously I had to make completely new friends when I went to university and friends from different backgrounds, from different ethnicities from completely different lifestyles..." (Female, aged 22, BAME, Tower Hamlets)

While a number of young adults ascribing their place-based loneliness to the challenges that pertain to being in an unfamiliar environment, seeing familiar faces and sense of community generated strong feelings of social connectedness in their neighbourhood.

The most socially connected places for young adults were their local amenities. The most common places were the local area/estate, park, pub/bar, gym and youth club. The less mentioned places of social connectedness included local shops, sports facilities, and the market. Overall, these spaces were considered to bring high levels of social connectedness because of the sense of community they provided. Participants liked the idea of seeing people they knew from their area and being able to say "hello" or even stop to have a chat. These interactions could take place either at the local shops with the friendly shopkeepers and local customers or at a shared community space. Shared spaces were considered particularly useful because they provided an opportunity for the locals to come together, socialise and play sports or gather for a common purpose:

'So...box one [for the most socially connect place in my neighbourhood] is just like this is like a local area neighbourhood. It's basically a football pitch alright. Then, next to it there's a bunch of seats and then this is literally where everyone congregates in the whole area you know. Usually in the summer is the most busiest. Literally, everyone...so for example, my group of friends would be on this side the younger kids they will play in there sometimes. People would play football with random people from other area...' (Male, aged 23, BAME, Tower Hamlets). See Fig. 3 for the corresponding output.

Participants also felt people and the community were very supportive, for example, neighbours were willing to help and offer guidance, look after each other, and the area had youth clubs to support the younger generation. Similarly, the local estate, gym and certain pubs offered participants the space to feel easy and comfortable to talk about their issues or have meaningful conversations because they were surrounded with people who could listen and understand them without judgement. Finally, other factors that mediated the link between sense of community and social connectedness in one's neighbourhood included comfort and diversity. Participants experienced a sense of comfort when they knew the people in their area, and could trust or have a laugh with them. Others liked the sense of diversity in their neighbourhood in terms of the variety of people from different cultures and backgrounds. One respondent specifically made reference to the

diversity found in his local market in his neighbourhood where a range of people from different cultures speaking a different languages traded (see Fig. 4). The participant felt diversity brought comfort, which in turn generated feelings of social connectedness:

'...being in a diverse, diverse neighbourhood, I feel like um, the, it makes you feel connected because there's so much different pathways and there's so much different people, which are comfortable. I think comfort is such a huge way of feeling connected, if someone feels comfortable in the surrounding, then it just makes it so much easier to feel socially connected because then you're more able to speak to someone on the street or say good morning...' (Male, aged 18, BAME, Hackney).

In addition, a number of the respondents considered religious spaces such as mosques and churches to be the most socially connected places. This was more prevalent amongst the Muslim participants. Religious spaces were said to bring people with the same values together and offer a space where one was free from judgement by others. Participants also felt that it was easy to talk to people and receive guidance and support in these places. Finally, the month of Ramadan was mentioned as a particular time when the Muslim participants felt most socially connected at a local mosque because it meant the local Muslim community including family, friends and neighbours would gather together for the mutual purpose of breaking their fast and praying together as a collective. This was highly favoured by the Muslim sample since it created a sense of community.

Thema 4. Comfort: Busy vs. Peaceful Environment.

A final thema that represents how young adults view and use their neighbourhood in terms of loneliness or social connectedness centred on the dyad of busy vs. peaceful environments.

London public transport such as tubes and buses were considered to be a lonely place for some because of their busyness and crowdedness; one is surrounded by strangers who neither talk to each other nor make eye contact. One participant used an analogy to complain that one cannot do anything in tubes but stand still "like a plant" and be under critical observation by others:

'Just you feel like you feel kind of like...I don't know. It's like, kind of under scrutiny like you can't really do anything but stand still like a plant because everyone is face to face with everyone, each other, like watching each other and you just have to completely...you know...you just be like a plant... and just wait till the train journey is over.' (Male, aged 23, BAME, Tower Hamlets)

Respondents also mentioned that London public transport is loud, noisy and there is considerable "hustle and hurry" where one sees individuals rushing to get to places. As a result, some expressed a sense of fear, nervousness, worry or anxiety when in tubes or buses.

While busy environments were associated with loneliness, peaceful environments were considered to bring a sense of social connectedness. For example, although parks were seen, by some, as lonely places where one ruminated, they were predominantly talked of in a positive light. Our findings indicate that the same place can be experienced as loneliness inducing or loneliness enhancing – some feel at peace when alone while others feel filled with ruminative thoughts in the same setting. Participants said they would intentionally go to the park to be away from everyone or when things got hectic because it provided them the space and time for reflection and peacefulness. (also, see Fig. 5 below):

'...sometimes you seek out loneliness because being around other people doesn't allow yourself to figure out everything you need to figure out. And so you take yourself away from busy-ness. And that's the positive loneliness sort of thing. Yeah. So when I go there [the park] and it is like, it is to intentionally be lonely it's to have that peace to figure out everything that's going on...' (Female, aged 24, BAME, Hackney).

Parks were generally considered to be places free of judgement by others and from the need to pretend to be somebody else in order to fit in:

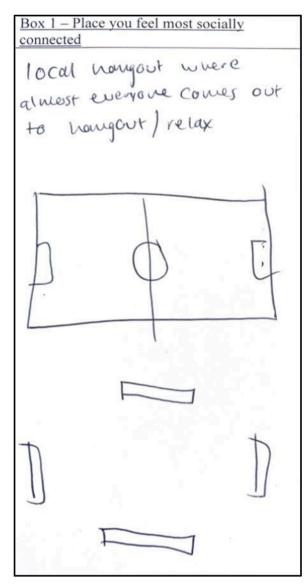


Fig. 3. An example of an output for the most socially connected place.

"...you can't be you all the time because then people are going to be like "you can't be like that" and "don't judge me" just, you don't know me, don't tell me what I can or cannot be just let me be me, you know but yeah, going to the park you don't have that, no one tells you "right, someone's here at the park wearing a t-shirt", "yeah you're wearing a vest", "ok!", no-one cares, everyone's just being themselves.' (Female, aged 18, BAME, Barking & Dagenham)

Discussion

This study examines young adults' experiences of loneliness in relation to social, spatial and emotional aspects of their neighbourhoods. It aims to explore where young adults, living in the most deprived areas, feel loneliest and also, most socially connected, in their neighbourhoods. It also examines the qualities and characteristics associated with the loneliest and most socially connected places. It uses social representations theory, and in particular a dialogical perspective that focuses on the role antinomies play in structuring common sense thinking. This allows it to provide an understanding of what drives people's sense of social connection or loneliness in their neighbourhoods: relationships/sociability or the lack thereof; activities and uses or the lack thereof; familiarity or the lack thereof; and comfort versus the lack thereof.

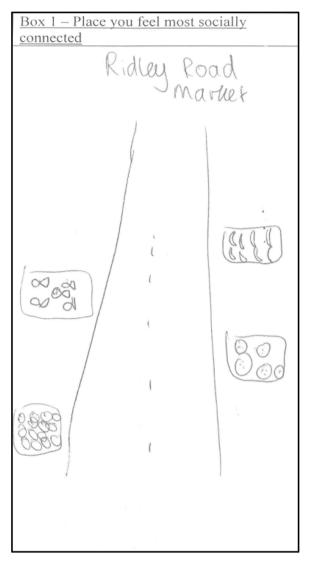


Fig. 4. An output of a local market as a place for feeling most socially connected.

Before outlining our findings in relation to existing research and theory, there are a few reflections on the interview process that should be considered. Firstly, since the topic of investigation was loneliness and there is a stigma associated with loneliness, it is possible that some participants might not have fully opened up to the researcher due to discomfort. This concealment aspect could have been more common amongst the male participants since recent research indicates that loneliness is more stigmatised by men than women (Barreto et al., 2022). However, based on one of the researchers' (SF's) experience of the interviews, the novelty of the GEM method enabled in-depth exploration of loneliness and participants appeared to relax into talking about it, as the interview transcripts demonstrate. Secondly, some of the participants considered the researcher very intelligent because he was a PhD student and the materials made reference to this. Therefore, there is a possibility that they did not share anything they felt made them seem unintelligent due to the pressure of social desirability.

This section considers our findings in relation to existing research and theory. We then consider the potential impact of our findings in relation to the provision of amenity spaces, or 'third spaces', within neighbourhoods. Finally, we consider the importance of participatory urban design and the need for inclusion of diverse perspectives within urban design processes.



Fig. 5. An example of a park as an output for the loneliest place though expressed as positive loneliness: time and space for contemplation and serenity.

This study adopted the GEM and semi-structured interviews to explore young adults' conceptualisations. Their representations of neighbourhood echo findings by Chawla (2002) suggesting that the younger generation value sociability, sense of community and having communal spaces for shared activities or organised sports; they are dissatisfied by feelings of boredom within their neighbourhoods. The current findings are also consistent with those of Matthews et al. (1999), indicating that adolescents and young adults view local public spaces such as local amenities and parks as opportunities for socialising as well as solitude and reflection. In addition, our findings corroborate those of Abbot-Chapman and Robertson (1999, 2009) in that home and parks can provide a sense of social connection depending on the sensations and relationships associated with them. For example, we found that parks were conducive to social connections because they created a sense of peacefulness (sensations) for some while homes were considered by others to be a socially connected place because they offered a space for one to be surrounded by people whom one loves (relationships).

However, what our study was able to identify, which is largely absent in the literature, is that a number of participants considered their homes and parks to be their loneliest places. We also found this for educational institutions and workplaces. In our study, social connection was not necessarily related to places where people were present, but it was related to spaces with specific qualities: social activities, routines,

interactions, exchanges and shared purpose. For some, these activities provide relief from their own thoughts and worries. This can be exacerbated by the life transitions that characterise this phase of life (e.g., new jobs, new employment, independence from family). Therefore, our findings highlight that the quality and meaning that young adults attach to a place makes it either a lonely or socially conducive environment for them. One advantage of tapping subjective experience in terms of themata is that one delves beyond obvious, objective circumstances – such as whether a person is physically alone in a place or not – into how subjectively they feel in, and make meaning of, particular places.

Our study has demonstrated that the link between physical and social conditions are, nevertheless, complex: particularly in understanding the co-evolution and interdependence between the social and physical infrastructures. This echoes Amin's (2007) ideas that the city is something that is not finished or bounded in space or time; far from being static, it is constantly changing socially and physically. Richaud and Amin (2019: S12) state 'we must move beyond conceptions of the city as a pre-given, constraining environment that impacts on individuals, towards understanding it as a series of affective environments that are constantly encountered situationally, through practices of inhabitation and place-making...'. Our findings align with this focus on the 'self-environment nexus'. The use of social representations theory allows us to deepen this focus in showing that four themata or antimonies shape the way that young adults in deprived areas view their spaces. Social representations of spaces as relationship and social connectedness enhancing are important for young, urban adults, as are spaces that give them a sense of purpose, familiarity and comfort.

When focusing on the spaces where connections were found, our study draws attention to amenity spaces, which have functionality and bring people together for shared endeavours. These 'third places' (Oldenburg and Brissett, 1982), including libraries, gyms, cafes, parks and places of worship, can play a critical role in enhancing sense of community and feelings of belonging in a neighbourhood. They can thereby help in combating loneliness. However, often the use of these spaces comes at an economic cost - paying for classes, drinks or entertainment - that those in deprived neighbourhoods cannot afford. In the UK, in the past 10 years, almost 500 libraries and 64 museums have been closed. Furthermore, park budgets have been reduced by an average of 40%, and local high street outlets and shops have closed (Stenning and Hall, 2018). Cuts in funding have strongly impacted youth services and community centres. Further research is needed to explore the impact of austerity on communities, especially within neighbourhoods of low socio-economic status.

Finally, we consider the implications of our research for the design of neighbourhoods. By tapping the conceptualisations of young adults, using verbal and non-verbal methods, we gain nuanced understanding of what urban spaces mean to them. A participatory design process would include the diverse perspectives seen in this study, such as both the negative and positive conceptualisations of parks. Such perspectives would be crucial for design decision making. Involving communities in such processes acknowledges that health inequities are caused by societal structures that are, in turn, influenced by built environment decisions which typically exclude those people who are most affected (e.g. Barton and Grant, 2006; Corburn et al., 2014; Pineo et al., 2019). Pineo et al. (2020: 3) state that 'urban design and planning processes should be inclusive of a wide range of knowledge sources to ensure that their outcomes promote health for everybody in society, not only those with the most agency and power'. Our research taps into a group usually excluded from such decisions. Adopting methods, and opening up processes, to incorporate diverse perspectives is important for design, to ensure places are well used and provide spaces and situations for social connections. Future work could include the further dimensions of site visits or spatial audit and analysis of the neighbourhoods in question as well as drawing upon methods from the field of affective geographies (such as walking) (e.g., Pile, 2010).

Conclusions

In sum, this study explored young adults' conceptualisation of their neighbourhood in contemporary times. In particular, it examined an under-researched demographic of young adults from lower socioeconomic backgrounds living in some of the most deprived areas who have been found to be the loneliest in the UK. The study used social representations theory to present representations of young adults' sense of their neighbourhood from a dialogical perspective. It discovered the important role that the antimonies sociability or the lack thereof, a sense of purpose or the lack thereof, familiarity or the lack thereof and comfort versus the lack thereof play in structuring young adults' conceptualisations of their neighbourhood. Since the same place was considered the loneliest for some whilst the most socially connected for others, it is the qualities that young adults associate with each place that matter. For example, qualities such as feeling bored and having nothing to do at home contributed to loneliness for some while being surrounded by family and friends at home was felt to promote a sense of social connectedness for others. This suggests that strengthening one's relationship with family members at home can foster feelings of belonging

Overall, the qualities associated with each place collectively point to the value young adults place on feeling socially connected and experiencing a sense of community, at the neighbourhood level. This corroborates the idea that wellbeing is influenced by social-environmental factors such as the urban neighbourhood. The global population is increasingly urbanising and mental health problems are significantly more prevalent in urban, rather than rural, spaces. Moreover, young adults (18–24 years old), particularly those from highly deprived communities, are especially vulnerable to loneliness. Young adulthood is also a peak time for the onset of many mental health problems. As such, greater resources should be targeted, with high priority, to support this demographic's wellbeing in terms of injecting into their neighbourhoods the potential to expeirence a sense of purpose, connectedness, comfort and familiarity.

While the current study was conducted before the appearance of the COVID-19 pandemic, social connectedness has been further eroded by it. The pandemic has highlighted people's need for close ties with others and the degree to which our social lives have an effect on our mental health. Loneliness has increased further particularly, amongst young adults (Bu et al., 2020a, 2020b; Payne, 2021) and comes at a significant cost to national health services. For the sake of the wellbeing of individuals and their social structures, mitigating loneliness therefore needs to take centre stage. To support young adults' wellbeing we need to recognise the importance of fostering social connectedness, by way of provision of opportunities for meaningful and comfortable social contact at the neighbourhood level.

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Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Gemma Moore reports financial support was provided by University College London.

Data availability

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References

- Abbott-Chapman, J., Robertson, M., 1999. Home as a private space: some adolescent constructs. J. Youth Stud. 2 (1), 23–43. https://doi.org/10.1080/
- Abbott-Chapman, J., Robertson, M., 2009. Adolescents' favourite places: redefining the boundaries between private and public space. Space Cult. 12 (4), 419–434. https:// doi.org/10.1177/1206331209348091.
- Amin, A., 2007. Re-thinking the urban social. City 11 (1), 100–114. https://doi.org/ 10.1080/13604810701200961.
- Appleyard, D., 1981. Livable Streets. University of California Press, Berkeley, CA.
- Barnes M., Blom A.G., Cox K., 2006. The social exclusion of older people: evidence from the first wave of the English Longitudinal Study of Ageing (ELSA), Final report. London: office of the Deputy Prime Minister. Available at: https://ifs.org.uk/publications/3551 (accessed 21 April 2022).
- Barreto, M., van Breen, J., Victor, C., Hammond, C., Eccles, A., Richins, M.T., Qualter, P., 2022. Exploring the nature and variation of the stigma associated with loneliness. J. Soc. Pers. Relat. 39 (9), 2658–2679. https://doi.org/10.1177/ 02654075221087190
- Barton, H., Grant, M., 2006. A health map for the local human habitat. J. R. Soc. Promot. Health 126 (6), 252–253. https://doi.org/10.1177/1466424006070466.
- Beech, R., Murray, M., 2013. Social engagement and healthy ageing in disadvantaged communities. Qual. Ageing Old. Adult. 14, 12–24. https://doi.org/10.1108/ 14717791311311076.
- Berkman, L.F., Glass, T., Brissette, I., et al., 2000. From social integration to health: Durkheim in the new millennium. Soc. Sci. Med. 51 (6), 843–857. https://doi.org/ 10.1016/S0277-9536(00)00065-4.
- Braun, V., Clarke, V., 2021. One size fits all? What counts as quality practice in (reflexive) thematic analysis? Qual. Res. Psychol. 18 (3), 328–352. https://doi.org/ 10.1080/14780887.2020.1769238.
- Bu, F., Steptoe, A., Fancourt, D., 2020a. Loneliness during a strict lockdown: trajectories and predictors during the COVID-19 pandemic in 38,217 United Kingdom adults. Soc. Sci. Med. 265, 113521 https://doi.org/10.1016/j.socscimed.2020.113521.
- Bu, F., Steptoe, A., Fancourt, D., 2020b. Who is lonely in lockdown? Cross-cohort analyses of predictors of loneliness before and during the COVID-19 pandemic. Public Health 186, 31–34. https://doi.org/10.1016/j.puhe.2020.06.036.
- Chawla, L., 2002. Growing Up in an Urbanizing World. Routledge, London. https://doi. org/10.4324/9781315541365.
- City Intelligence., 2020. Exploring London's Public Realm: final report. Available at: https://www.london.gov.uk/sites/default/files/exploring_londons_public_realm.pdf (accessed 13 July 2021).
- Corburn, J., et al., 2014. Health in all urban policy: city services through the prism of health. J. Urban Health 91 (4), 623–636. https://doi.org/10.1007/s11524-014-9886-3
- Davies, M., Belesova, K., Crane, M., et al., 2021. The CUSSH programme: supporting cities' transformational change towards health and sustainability. Wellcome Open Res. 6, 100. https://doi.org/10.12688/wellcomeopenres.16678.2.
- De Paola, J., Hakoköngäs, E.J., Hakanen, J.J., 2020. #Happy: constructing and sharing everyday understandings of happiness on instagram. Hum. Arena. 1–19. https://doi.org/10.1007/s42087-020-00149-z.
- DiJulio B., Hamel L., Muñana C. and Brodie M., 2018. Loneliness and social isolation in the United States, the United Kingdom, and Japan: an international survey. The Economist & Kaiser Family Foundation. Available at: https://files.kff.org/attach ment/Report-Loneliness-and-Social-Isolation-in-the-United-States-the-United-Kin gdom-and-Japan-An-International-Survey (accessed 21 April 2022).
- Domenech-Abella, J., et al., 2017. The role of socio-economic status and neighborhood social capital on loneliness among older adults: evidence from the Sant Boi Aging Study. Soc. Psychiatry Psychiatr. Epidemiol. 52 (10), 1237–1246. https://doi.org/10.1007/s00127-017-1406-9.
- Fardghassemi, S., Joffe, H., 2021. Young adults' experience of loneliness in London's most deprived areas. Front. Psychol. 12 (1750), 1–14. https://doi.org/10.3389/ fpsyg.2021.660791.
- Gruebner, O., Rapp, M.A., Adli, M., Kluge, U., Galea, S., Heinz, A., 2017. Cities and mental health. Deutsches Ärzteblatt Int. 114 (8), 121. https://doi.org/10.3238/ arztebl.2017.0121.
- Habermas, J., 1989. The Structural Transformation of the Public Sphere: An Inquiry Into a Category of Bourgeois Society. Polity, Cambridge.
- Hammond, C., Qualter, P., Victor, C., & Barretto, M., 2018. Feels Lonely? The Results of the World's Largest Loneliness Study. BBC Loneliness Experiment. Available at: https://www.bbc.co.uk/programmes/articles/2yzhfv4DvqVp5nZyxBD8G23/who-feels-lonely-the-results-of-the-world-s-largest-loneliness-study (accessed 22 May 2023).
- Hartig, T., et al., 2014. Nature and health. Annu. Rev. Public Health 35, 207–228. https://doi.org/10.1146/annurev-publhealth-032013-182443.
- Ibbetson, C., 2019. WHo are the most lonely people in the UK? YouGov plc. Available at: https://yougov.co.uk/topics/relationships/articles-reports/2019/10/03/yo ung-britons-are-most-lonely (accessed 21 April 2022).

- IPSOS MORI., 2009. Social grade: a classification tool: Bite sized thought piece. Available at: https://www.ipsos.com/sites/default/files/publication/6800-03/MediaCT_thou ghtpiece_Social_Grade_July09_V3_WEB.pdf (accessed 9 August 2021).
- Jacobi, F., Höfler, M., Siegert, J., et al., 2014. Twelve-month prevalence, comorbidity and correlates of mental disorders in Germany: the Mental Health Module of the German Health Interview and Examination Survey for Adults (DEGS1-MH). Int. J. Method. Psychiatr. Res. 23 (3), 304–319. https://doi.org/10.1002/mpr.1439.
- Jacobs, J., 1961. The Death and Life of Great American Cities. Random House, New York. Joffe, H., Elsey, J.W., 2014. Free association in psychology and the grid elaboration
- method. Rev. Gen. Psychol. 18 (3), 173–185. https://doi.org/10.1037/gpr0000014. Joffe, H., Smith, N., 2016. City dweller aspirations for cities of the future: how do
- Joffe, H., Smith, N., 2016. City dweller aspirations for cities of the future: how do environmental and personal wellbeing feature? Cities 59, 102–112. https://doi.org/ 10.1016/j.cities.2016.06.006.
- Joffe, H., 2003. Risk: from perception to social representation. Br. J. Soc. Psychol. 42 (1), 55–73. https://doi.org/10.1348/01446603763276126.
- Kearns, A., Whitley, E., Tannahill, C., et al., 2015a. Loneliness, social relations and health and well-being in deprived communities. Psychol. Health Med. 20 (3), 332–344. https://doi.org/10.1080/13548506.2014.940354.
- Kearns, A., Whitley, E., Tannahill, C., et al., 2015b. Lonesome town'? Is loneliness associated with the residential environment, including housing and neighborhood factors? J. Community Psychol. 43 (7), 849–867. https://doi.org/10.1002/ jcop.21711
- Kemperman, A., et al., 2019. Loneliness of older adults: social network and the living environment. Int. J. Environ. Res. Public Health 16 (3), 406. https://doi.org/ 10.3390/jierph16030406.
- Landis, J.R., Koch, G.G., 1977. The measurement of observer agreement for categorical data. Biometrics 33 (1), 159–174. https://doi.org/10.2307/2529310.
- Larson, R., 1995. Secrets in the bedroom: adolescents' private use of media. J. Youth Adolesc. 24 (5), 535–550. https://doi.org/10.1007/BF01537055.
- Lincoln, S., 2015. 'My bedroom is me': young people, private space, consumption and the family home. In: Casey, E, Taylor, Y (Eds.), Intimacies, Critical Consumption and Diverse Economies. Palgrave Macmillan Studies in Family and Intimate Life. Palgrave Macmillan, London, pp. 87–106. https://doi.org/10.1057/ 9781137429087 5.
- Lovell, S.A., Gray, A.R., Boucher, S.E., 2017. Place, health, and community attachment: is community capacity associated with self-rated health at the individual level? SSM-Populat. Health 3, 153–161. https://doi.org/10.1016/j.ssmph.2016.12.002.
- Lynch, K., 1960. The Image of the City. MIT Press, Cambridge, MA.
- Lynch, K., 1984. Good City Form. MIT Press, Cambridge, MA.
- Markova, I., 2015. On Thematic Concepts and Methodological (Epistemological)
 Themata. Papers on Social Representations 24 (2), 1–31.
- Massey, D., 1994. Space, Place and Gender. University of Minnesota Press, Minneapolis, MN.
- Matthews, H., Limb, M., Taylor, M., 1999. Reclaiming the street: the discourse of curfew. Environ. Plan. A. 31 (10), 1713–1730. https://doi.org/10.1068/a311713.
- Matthews, T., Odgers, C.L., Danese, A., et al., 2019. Loneliness and neighborhood characteristics: a multi-informant, nationally representative study of young adults. Psychol. Sci. 30 (5), 765–775. https://doi.org/10.1177/0956797619836102.
- Moscovici, S., 1976. La psychanalyse, Son image, Son Public [Psychoanalysis, Its Image and Its Public], 2nd edn. Presses Universitaires de France, Paris.
- Moscovici, S., 2008. Psychoanalysis: Its Image and Its Public. Polity Press, Cambridge. Moscovici, S., 2011. An essay on social representations and ethnic minorities. Soc. Sci. Res. 50 (3–4), 442–461.
- Navarrete-Hernandez, P., Laffan, K., 2019. A greener urban environment: designing green infrastructure interventions to promote citizens' subjective wellbeing. Landsc. Urban Plan. 191, 103618 https://doi.org/10.1016/j.landurbplan.2019.103618.
- Nemecek, D., 2020. Loneliness and the workplace: 2020 U.S. Report, 2020. Cigna. Available at: https://www.cigna.com/static/www-cigna-com/docs/about-us/newsroom/studies-and-reports/combatting-loneliness/cigna-2020-loneliness-report.pdf (accessed 21 April 2022).
- O'Connor, C., Joffe, H., 2020. Intercoder reliability in qualitative research: debates and practical guidelines. Int. J. Qual. Method. 19, 1–13. https://doi.org/10.1177/1609406919899220
- Office for National Statistics., 2019. Neighbourhood belonging and community engagement by age group. London: office for National Statistics. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/datasets/youngpeopleandtheirneighbourhoods (accessed 14 July 2021).

- Oldenburg, R., Brissett, D., 1982. The third place. Qual. Sociol. 5, 265–284. https://doi. org/10.1007/BF00986754.
- Payne, C., 2021. Mapping loneliness during the coronavirus pandemic. Office for National Statistics. Available at: https://www.ons.gov.uk/peoplepopulationandco mmunity/wellbeing/articles/mappinglonelinessduringthecoronaviruspandemic/2 021-04-07 (accessed 21 April 2022).
- Peen, J., Schoevers, R.A., Beekman, et al., 2010. The current status of urban-rural differences in psychiatric disorders. Acta Psychiatr. Scand. 121 (2), 84–93. https:// doi.org/10.1111/j.1600-0447.2009.01438.x.
- Pile, S., 2010. Emotions and affect in recent human geography. Transact. Instit. Brit. Geograph. 35 (1), 5–20. https://doi.org/10.1111/j.1475-5661.2009.00368.x.
- Pineo, H., Zimmermann, N., Davies, M., 2019. Urban planning: leveraging the urban planning system to shape healthy cities. In: Galea, S, Ettman, CK, Vlahov, D (Eds.), Urban Health. Oxford University Press, New York. https://doi.org/10.1093/oso/9780190915858.003.0021
- Pineo, H., Moore, G., Braithwaite, I., 2020. Incorporating practitioner knowledge to test and improve a new conceptual framework for healthy urban design and planning. Citi. Health 1–16. https://doi.org/10.1080/23748834.2020.1773035.
- Pineo, H., 2020. Towards healthy urbanism: inclusive, equitable and sustainable (THRIVES)—an urban design and planning framework from theory to praxis. Citi. Health 1–19. https://doi.org/10.1080/23748834.2020.1769527.
- Pyle E., Evans D., 2018. Loneliness—What characteristics and circumstances are associated with feeling lonely? Office for National Statistics, UK. Available at: https://www.gov.uk/government/statistics/loneliness-what-characteristics-and-circumstances-are-associated-with-feeling-lonely (accessed 21 April 2022).
- Richaud, L., Amin, A., 2019. Mental health, subjectivity and the city: an ethnography of migrant stress in Shanghai. Int. Health 11 (1), S7–S13. https://doi.org/10.1093/ inthealth/ihz029.
- Roberts, K., 2008. Youth in transition: in Eastern Europe and the West. Palgrave Macmillan, Basingstoke.
- Rydin, Y., Bleahu, A., Davies, M., et al., 2012. Shaping cities for health: complexity and the planning of urban environments in the 21st century. Lancet North Am. Ed. 379 (9831), 2079–2108. https://doi.org/10.1016/S0140-6736(12)60435-8.
- Sacco, D.F., Ismail, M.M., 2014. Social belongingness satisfaction as a function of interaction medium: face-to-face interactions facilitate greater social belonging and interaction enjoyment compared to instant messaging. Comput. Hum. Behav. 36, 359–364. https://doi.org/10.1016/j.chb.2014.04.004.
- Sennett, R., 1994. Flesh and stone: the Body and the City in Western Civilization. Faber & Faber. London.
- Smith T., Noble, M., Noble, S., Wright, G., McLennan, D., & Plunkett, E., 2015. The English Indices of Deprivation 2015: technical Report. Department for Communities and Local Government. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/464485/English_Indices_of_Deprivation 2015 - Technical-Report.pdf (accessed 21 April 2022).
- Stenning A. and Hall S.M., 2018. On the Frontline: loneliness and the Politics of Austerity. Discover Society. Available at: https://archive.discoversociety.org/2018/ 11/06/on-the-frontline-loneliness-and-the-politics-of-austerity/ (accessed 27 November 2021)
- The New Economics Foundation (NEF), 2008. Five ways to wellbeing. The Evidence. http://www.neweconomics.org/projects/entry/five-ways-to-well-being.
- http://www.neweconomics.org/projects/entry/five-ways-to-well-being.

 Tinkler, L. 2015. Measuring National Well-being: Personal Well-being in the UK,

 2014–2015. In ONS. (Ed.), Statistical Bulletin.: ONS. Available at: https://www.ons.
 gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuringnationalwellbeing/2015-09-23 (accessed 26 April 2022).
- Tonne, C., Adair, L., Adlakha, D., et al., 2021. Defining pathways to healthy sustainable urban development. Environ. Int. 146, 106236 https://doi.org/10.1016/j. envint.2020.106236.
- Watson, S., 2006. City publics: the (dis)enchantments of Urban encounters. Questioning Cities. Routledge, UK.
- Wee, L.E., et al., 2019. Loneliness amongst low-socioeconomic status elderly Singaporeans and its association with perceptions of the neighbourhood environment. Int. J. Environ. Res. Public Health 16 (6), 967. https://doi.org/ 10.3390/ijerph16060967.
- Yu, R., et al., 2017. Associations between perceived neighborhood walkability and walking time, wellbeing, and loneliness in community-dwelling older Chinese people in Hong Kong. Int. J. Environ. Res. Public Health 14 (10), 1199. https://doi.org/ 10.3390/ijerph14101199.