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Mental well-being, housing provision and social valuation in a United Kingdom context: A planning issue?

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Abstract

This paper provides insights into the influence of housing quality on occupier mental well-being based on a critical review of interdisciplinary literature spanning housing, health and well-being, autonomy, and social value. We consider the significance of extant research findings for the mental well-being of housing occupants and indicate the relevance for planning. We find evidence of the relationship between housing occupier autonomy for the lived experience of wellness and discuss the need for mental well-being valuation to inform social housing provision in the United Kingdom. We introduce an original conceptual framework representing components of the housing environment shaping occupier mental well-being and conclude that planning in its co-ordinative capacity has the capability to connect housing provision with mental well-being determinants. However, to do so, a radical shift in the present UK politics of social housing provision and planning will be required.

Key Words

Mental well-being, Autonomy, Housing quality, Provision, Social valuation, Planning

Introduction

A large body of research has explored the relationships between human health, the built environment and housing. However, demonstrating relationships in the scientific statistical tradition has been compromised by the number of potentially relevant variables involved and their complex causal relations, especially in relation to mental health and well-being (Zhu and Shelton, 1996; Ilesanmi, 2012). In this paper we examine extant evidence of the relationship between housing quality and mental well-being, and its relevance for social value and the planning system based on a review of relevant interdisciplinary literature.

Determining the habitable conditions required for people to experience mental well-being positively, cannot readily be isolated from other health determining factors to satisfy objective, static standards (Lawrence, 1995; Ilesanmi, 2012). Mental well-being dimensions of daily life,

including housing microenvironment variables fundamental to individual lived experiences, are qualitative in nature (Lawrence, 2009). Furthermore, the ability of individuals to proactively pursue and maximize their ‘wellness’ or optimal well-being, as promoted by contemporary preventive approaches to health, is dependent on broader societal, cultural and political economy contexts (ODPHP, 2018). Despite these empirical challenges, a growing weight of evidence to be considered in this paper suggests that differences in the physical conditions of the home (for example, damp, fuel poverty, overcrowding) and the neighbourhood (community, public realm) and psychosocial housing environments (individual and community autonomy, empowerment, status, control, perceived relative position and/or insecure residence) influence not only the health but the mental well-being of housing occupants. In the paper we propose an opportunity to embed the fundamental right to mental well-being in planning activity in the United Kingdom (UK) through the application of social planning principles to the provision of housing, including in the social housing sector.

Despite the market-led role of contemporary planning encompassing a broad range of spatial, land use, transport and neighbourhood planning and advocacy activities in the UK that have relevance for mental well-being (RTPI, 2020), we must not forget its legacy ‘town and country planning’ mission of improving urban housing and environmental standards under the influence of early twentieth century public health conditions (Hall, 2014). In the mid-twentieth century, planning was consolidated and institutionalized under the Ministry of Town and Country Planning, leading to its remit being government dictated. In the employ of politically controlled central and local government departments, the role of planning’s “once proud élite of technocrats” (Sutcliffe, 1981) became a function and a tool of the state, subject to the fluid national and local territorial politics of the day (Allmendinger and Haughton, 2013). In the structural context of neo-liberal privatization of development finance, state planning became an actor in the commodification of urban space (Knox and Pain, 2010). However, the ‘social-city’ principles of Ebenezer Howard’s late-nineteenth century English Garden City movement response to industrial era capitalist urbanization (Allmendinger and Haughton, 2013; Adams et al., 2015) are apparent in renewed engagement of the planning profession with social welfare and health. This revival of ‘social-city’ planning for health principles is illustrated, for example, by the Town and Country Planning Association (TCPA, 2015; 2020), the NHS’s ambitious ‘healthy new towns’ programme partnership launched in 2015 (NHS England, 2019) and the Royal Town Planning Association (RTPI, 2020). But despite renewed concern for the association between urban neighbourhood and place design and human health, much recent

commentary has tended to focus on physiologically *unhealthy* development outcomes (Sarkar et al., 2014).

Based on an extensive critical review of relevant cognate interdisciplinary literature conducted for a doctoral research degree at the University of Reading, the paper highlights how planning could promote an ambitious social value housing agenda for the realization of proactive wellness outcomes as part of the ‘communicative turn’ in planning espoused by (Healey, 1996).

The paper aims to make a novel contribution to recent research seeking to reunite planning with health as a positive state by focusing specifically on mental well-being as experienced by housing occupants. In the first section we consider evidence for the association between mental well-being and housing. In the second section, we consider the relevance of the individual and community autonomy of housing occupants for lived experiences of mental well-being in the contemporary structure of UK housing provision. In the third section, we explore the implications for public sector social valuation under the UK post-2012 Social Value Act for social housing services commissioning. In the final section, we present a preliminary multi-component conceptual framework to illustrate opportunities for planning activity based on social principles to help reconnect housing provision with optimal occupier mental well-being, including in the social housing sector.

Mental well-being association with housing

The concept of mental well-being derives from what has been referred to as a global concept of health which includes social components (Mansourian, 2009, p. 26). The World Health Organization’s (WHO, 1948) definition of health, encompassed “a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). This definition has been regarded as breaking new ground at the time by presenting a positive, in contrast to a negative (ill)health view and by recognizing the mental and well-being dimensions of health (Ware, 1987; Kaplan et al., 1993, p. 10; Julliard et al., 2006). More recently, the World Health Organization (WHO, 2003) and the American Psychiatric Association APA (2015, updated 2018), broadened this positive, or salutogenic, definition of health by referring to an individual’s functioning, including their ability to proactively realize their personal potential, their stress management and coping skills, their ability to be productive, and their sense of self-esteem and resilience. Attempts to refine the definition of well-being have highlighted its fluidity, or dynamic nature (Nagase, 2012), its presentation as

a positive state (Sarafino, 2002, p. 5), a dynamic balance (Neuman, 1990; Saylor, 2004) and a continuum (Antonovsky, 1987, in Sarafino, 2002, p. 5). These perspectives suggest that mental state as a component of well-being is fluid and contingent upon a range of determining factors, or ‘social determinants of health’, during an individual’s life course, as opposed to a fixed attribute (ODPHP, 2018).

Housing is multi-dimensional, characterized by its durability, relative structural inflexibility and spatial fixity (Tse and Love, 2000). A bundle of attributes unique to each residential unit, its quality, location and environment (Lerman, 1979), has been found to have implications for population health and mental well-being, often measured by using primarily quasi-experimental well-being valuation models computing differences between actual and expected study population trends (Sidney et al., 2017; Vine et al., 2017; Emeghe, 2022). Studies have reported a very high significant impact of housing deprivation on mental health. Improved self-rated health and well-being has been reported when homes are improved, such as by the installation of insulation and effective heating (Howden-Chapman et al., 2007; Howden-Chapman et al., 2008; Kearns et al., 2011; Macmillan et al., 2016; Francisco et al., 2017). Dampness (Hopton and Hunt, 1996) has been found significantly associated with mental depression and problems of linked functioning such as lack of sleep, energy and social isolation (Hyndman, 1990; Packer et al., 1994). Other identified physical building characteristics influencing mental health include indoor air quality, lighting, noise, warmth (Petrova et al., 2013), and residential type, form and floor level (Evans, 2003), and overcrowding (Lepore et al., 1991; Maxwell, 1996; Evans et al., 1998; Marais et al., 2013). Investigation into the influence of building design on functional social interaction has found that housing design solutions, such as the subdivision of long corridor designs, promote resident well-being by reducing the effects of crowding and noise (Baum and Valins, 1979; Baum and Davis, 1980; Hillier and Hanson, 1984). Neighbourhood designs in the form of traditional, suburban and cluster housing with proximity to urban parks, have been found significant for mental health and well-being (Dong and Qin, 2017; Zuniga-Teran et al., 2017). Additionally, for inclusiveness in spatial planning, housing and built environment design have impacts on mobility necessary for the social integration of people with physical disabilities (Handy et al., 2002; WHO, 2003).

Relevant for strategic spatial planning, studies have revealed associations between housing density related overcrowded living conditions and reduced sense of economic and social security and psychological stress (Wilkinson, 1999; Evans et al., 2000; Evans et al., 2001;

Bratt, 2002). Studies by Lowry (1991), Newman (2001), Weich et al. (2002) and Kearns et al. (2012) found a link between high density housing areas with shared deck access such as public walkways or central staircases, and higher rates of occupant depression due to limited social control of space by residents. Evans (2003) found that living in high-rise/multi-unit dwellings is detrimental to the development of supportive social relationships within the home and may adversely impact mental health. Outside the home, interpersonal relationships in the neighbourhood contribute to social capital that is beneficial to human health and welfare (Putnam, 2001). The design of residential buildings and their environment affect mobility and interaction necessary for social integration and mental well-being, especially for those with physical disability (Handy et al., 2002; WHO, 2003), highlighting the need for comprehensive land use and mobility planning.

Urban realm decay, which may be influenced positively by regeneration involving urban planning, has been found associated with negative externalities of mental well-being (Nasir et al., 2015). Deprived homes in low-quality neighbourhoods have been found to have mental health effects (Evans, 2003; Bonnefoy, 2007; Thomas et al., 2007; Kearns et al., 2012). In line with Skogan and Maxfield (1981), Austin et al. (2002) found resident satisfaction with the local housing environment to have a significant direct negative impact on the perception of safety and security that is detrimental to emotional security and mental health (Donnelly, 1989; Austin et al., 2002; Evans, 2003). There is support for the view that favourable psychosocial living environments are linked to a better state of population health, while the absence thereof may lead to unhealthy social and anti-social behaviours (Egan et al., 2008). Community participation, cohesion and less exposure to violence and discrimination are associated with social support and social network with positive impacts on mental health. Thomas et al. (2007) and Bond et al. (2012) highlighted that the psychosocial environment is the most important domain for mental well-being and, conversely, mental *disorder* related to housing residence. Jackson (2003) has argued for mixed land uses, gridded street patterns and open spaces to maximize physical and social contact (Kunstler, 1996) and counter poor housing quality (Jones-Rounds et al., 2014).

RTPI (2020) advice to planners, regarding the impact of urban places on mental health, identified green, active, prosocial, and safe environments as key principles for urban design. Significant for planning activity, Pederson (2015) argued that negative environmental externalities can intrude inside the home, thereby increasing adverse effects on occupier well-being. For example, noise pollution linked to urban congestion, a transport planning matter,

has been found adverse for psychological and biological development (Lercher et al., 2002; Pederson, 2015), lowering mental component summary and quality of life respectively (Roswall et al., 2015; Foley et al., 2017). Planning activity in relation to a wide range of land use, density, transport planning, area regeneration and design guidance, could help ameliorate complex, interrelated negative externalities associated with environmental and building attributes impacting mental health and well-being, we suggest. For instance, urban infrastructure and public realm design affect human mobility and transportation modal shift associated with walkability, air quality, and visual and physical access to green space and landscape, and recreational spaces which are fundamental to health and mental well-being (Kuo et al., 1998; Frumkin, 2001; Jackson, 2003; Guite et al., 2006; Thompson, 2011; Pain et al., 2018). Neighbourhood plans such as traditional, suburban and cluster housing have been found significant for mental health and well-being (Zuniga-Teran et al., 2017), with proximity to urban parks also significant and positive (Dong and Qin, 2017).

Evidence from these studies indicates that the provision of housing that is attuned to mental well-being experienced at a granular household and individual level within the home, requires a coordinated approach to decision-making involving planners, architects and landscape designers. In addition to the physical housing conditions discussed so far, the concept of autonomy has been found significant for an individual's ability to manage stress, function, realize their personal potential, be productive and have a sense of self-esteem and resilience in accord with the contemporary positive definition of health and wellness (WHO, 2003; APA, 2015, updated 2018).

Autonomy, mental well-being and housing provision

Autonomy defined as self-authorship, corresponds to the ideal of part authoring one's life through master-crafting, innovation and decision-making over the life course (Foucault, 1986; Raz, 1986, p. 369; Wall, 1998, p. 128; Dawkins, 2017). Kegan (1994) referred to self-authorship with freedom from external constraint, as developing (or authoring) the self and personal identity. Self-authorship according to Dawkins (2017), emphasizes the importance and capability of an individual to reflect on and reject prevailing social norms that may be both alienating and oppressive. This definition adapts that of Mill in 1859 (see Mill, 1956), which asserted that autonomy can be legitimately nurtured within the confines of the rights and concerns of others. However, according to the harm principle, an act by a person injurious to others amounts to moral disapprobation, and the abrogation of autonomy in so far as it touches

affairs that are of profound importance to another person (Oshana, 2006). An early study by Bratt (2002) indicated that empowerment is only achievable if autonomy, or functional dependence, exists to some extent.

Research has illustrated the relevance of autonomy (agency or choice) for housing occupier satisfaction and well-being (Burchardt et al., 2013; Dawkins, 2017). Parsell (2016) argued that central to ideas of the home are people having autonomy in the space to live in of their own volition. Knowing that decision-making options (agency) in relation to one's home are available increases the capacity to achieve set long-term goals (Burchardt et al., 2013) and experience a sense of well-being. A key conclusion from research on housing autonomy from a capability theory perspective (Watts and Blenkinsopp, 2021) is that a lack of control over one's immediate housing environment can actively damage social relations and mental well-being. But despite the evidence of autonomy positive attributes for housing users, housing ownership or rental, location, quality, and user satisfaction are not simply matters of individual or community choice. Instead, they reflect uneven societal access to economic resources and the spectrum of institutional, legal, and regulatory and policy frameworks operating in any given country. The degree of autonomy of housing users is conditioned by socio-economic and political structural and institutional contexts.

Newman (2001) found that living in independent housing is associated with greater satisfaction with housing and neighbourhood. Evans (2003) and Bond et al. (2012) asserted that the relationship of the landlord (as the housing service provider) with the occupant is relevant for promoting mental well-being. Clark and Kearns (2012) found landlord relations to be an important moderator of the relationship between home improvements and psychosocial benefits derived by occupants. For example, home improvements may impact mental health negatively if there are linked increased household costs (Halpern, 1995; Thomas et al., 2005). Relevant at the housing neighbourhood level, community autonomy and relational autonomy (Campbell, 2002) have been construed as valuable in the dynamics of deliberation and reasoning. Liberal housing policies have often been critiqued on the basis that while they may promote individual autonomy and freedom of choice (Imbroscio, 2006; Dawkins, 2017), they may also lessen neighbourhood and community stability (Imbroscio, 2006). According to Kymlicka (1989), as members of a specific cultural community, individuals cannot make sense of their choices, nor will choices be meaningful if detached from the concept of relational autonomy. However, Raz (1986) argued that collective goods and social practices may not all be advantageous to the ideal of autonomy. Wellman (2003) stated that group autonomy can

only be understood in terms of the autonomy of the individual group members. Community autonomy expressed in neighbourhood action for example, would need to be representative of collective housing preferences related to individual well-being interests. Local authority neighbourhood planning and advocacy could therefore assist the representation of diverse community and individual well-being interests relevant to housing provision.

In the UK institutional context in 2020, housing provision was predominantly owner-occupied (approximately 70% of dwellings). However, 30% of the population lived in local authority council and social housing (approximately 18% of dwellings), and private rented housing (approximately 12% of dwellings) (Spicker, 2017; MHCLG, 2020 - Ministry of Housing, Communities & Local Government), where autonomy is limited not only by the affordability of housing and improvements but also by institutional structural features conditioning agency and choice as an occupier, such as land and property rights. Office of National Statistics (ONS) statistics formerly produced by the Department for Levelling Up, Housing and Communities, released in June 2022¹, indicate that the owner-occupied population has reached nearer 64% and is in decline, making the issue of occupier autonomy an increasingly important concern. Since any form of tenancy ultimately involves mutual obligations between the tenant(s) and landlord, tenant autonomy will inevitably be limited to different degrees in the absence of measures to address cross-sectoral agential equity.

Giddens' (1984) theory of structuration, Ball's (in Ball, 1983; 1986) analysis of UK housing provision in the late twentieth century provided valuable context for understanding structural features associated with the roles of institutions and of markets as institutions. Ball's 'structure of provision' (SoP) framework described "a historically given process of providing and reproducing the physical entity, housing; focusing on the social agents essential to that process and the relations between them" (Ball, 1986, p. 158). The framework illustrates the interaction and power relations between social agents in the process of the production, allocation, consumption, and reproduction of housing involving finance capital or credit, land ownership, exchange, housing consumption and state housing agency, legislative, policy and allocation frameworks. Ball's analysis helps explain socially unequal rights to housing and the linked reduced autonomy of occupants of social housing which may impact mental well-being.

The structure of housing provision shapes mental well-being inequalities with social and spatial dimensions relevant for planning. Relevant for unravelling the relationship between autonomy

¹ <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/dwellingstockbytenureuk>

and functionality equity to inform spatial planning is the distinction between psychological well-being and subjective well-being, which concerns peoples' lived experiences. As Keyes et al. (2002, p. 1007) put it "although people live in objectively defined environments, it is their subjectively defined worlds that they respond to." Young and Wilmott's 1957 ground-breaking social study, *Family and Kinship in East London*, (Young and Wilmott, 2011, first edition reprint), drew attention to the effects of post-war slum clearance policy displacement of families from their established community support networks to new housing locations, illustrating the power of planning to influence lived experiences relevant for mental well-being. The range of physical, environmental, psycho-social, and institutional influences on housing occupier mental well-being as a component of wellness revealed by extant studies reviewed so far, suggests that a coordinated approach to housing provision and policy is required, including planning activity and policy.

Valuing mental well-being through social valuation

The relationship between housing and health has become a matter of increasing policy attention in the UK (Tweed et al., 2017). The Chartered Institute of Environmental Health (CIEH, 2017), for example, stated that poor quality housing in the UK is costing the National Health Service (NHS) around £1.4bn (GBP) and wider society around £18bn (GBP) per year, emphasising that improving poor quality or bad housing, both in terms of physical condition and management to reduce its adverse impact on health, is a national priority. The TCPA Healthy Homes Bill (2020, p. 1) stressed that "unhealthy homes and neighbourhoods do more than [just] damage people's mental and physical health, as important as this is. They also impact society as a whole, making it less efficient, resilient, and productive." However, Parson (1987) identified that many radical and progressive housing policy recommendations have focused solely on the production and consumption of housing units, but not on self-defined needs, wants or ways of living of people; they make the case for rights to autonomy to be represented in progressive housing provision. UK institutional, legal, and regulatory frameworks and policies intervene in the housing market in relation to need assessment according to political, financial and performance criteria. Housing policy evaluation is, in economic terms as a form of market, based on an efficient allocation of resources that should match demand and supply with the aim of meeting equilibria (Makinde, 2016). These equilibria depend on adequate competition for downward prices, bridging the information and knowledge gap, and the existence of multiple suppliers and purchasers, to ensure satisfaction corresponding to the overall level of socio-economic development (Makinde, 2016). Despite government housing interventions,

supply remains predominantly market based (Wakely, 2014), underpinning affordability, use rights, autonomy and conditions that vary according to an individual's economic circumstances which may be either detrimental, or not conducive, to optimized mental well-being.

If attuned to mental well-being, valuation methods stemming from the *Public Services (Social Value) Act*, 2012 and (Cabinet Office, 2015) might better address mounting policy economic cost concerns for the relationship between housing and health in market-oriented UK policy. The privatization of housing service provision and financial restraint (Crook, 1986; Wijburg and Waldron, 2020) has led to increasing pressure for scrutiny and accountability in service commissioning (Cabinet Office, 2015). Common valuation approaches used span cost-benefit analysis (CBA) which does not consider social issues, such as the HM Treasury 'Green Book', and social cost-benefit analysis (SCBA) which is used to assess investment projects from the viewpoint of the aggregate society (Ruffino and Jarre, 2021). Since a number of costs and benefits cannot be valued by the market supply-demand mechanism, non-market valuation techniques are used to investigate the monetization of the improved social amenities for willingness-to-pay (WTP) for an improvement, such as to preserve the natural environment for future generations (bequest values), or compensation associated with the willingness-to-accept (WTA) if an amenity would be lost (Ogunba, 2013). The SCBA approach to analysis considers monetary prices, costs, and benefits etc., as a means to assess the impact of different options on social welfare (HM Treasury, 2022, p. 40). It is an economic analytical tool with the aim of evaluating projects that are legally acceptable within the framework of national economic development objectives (Cabinet Office, 2015) and the broad allocation of resources.

Well-being has become recognized by the UK Government as not only supporting private sector housing providers to comply with the Public Services Act, 2012, but also informing public sector housing provision decision-making to ensure effective resource allocation (certification of funding expenditure that is as effective and prudent as possible) (Trotter, 2013). Addressing the need for more refined analytical methods (Vine et al., 2017), the Housing Associations Charitable Trust² (HACT) introduced a well-being approach to valuation which has had considerable influence on social housing provision in the UK. The approach is similar to, but differs from, the non-market valuation and the CBA or SCBA methods. Whereas existing methods widely used for the valuation of non-market goods are dependent on perception, the well-being approach to analysis uses self-reported measures represented in

² <https://www.hact.org.uk/>

national datasets which undergo academic scrutiny. The HACT method has gained prominence in the valuation of human well-being on account of its relevance for provision, welfare and cost efficiencies within the housing sector and other sectors that relate to well-being, by attempting to monetize non-traded goods and services (Fujiwara et al., 2014). Despite data and interpretive limitations (Fujiwara, 2013), Trotter (2013) noted its strength for harmonizing discussions in comparable, similar terms across housing business investment comprising housing management and maintenance, and the supply of new homes.

In theory, subject to financial and political priorities, the approach can be applied to any type of outcome that has an impact on the subjective well-being of people with a view to monetization and application in a social housing provider's activity (Sidney et al., 2017). Richards and Nicholls (2015, pp. 4-5) recognized that such valuation can be accounted for qualitatively, quantitatively and/or monetarily to address the need for analytical completeness, relevance, accuracy and rigour. Through quantitative-monetary evaluative research, social valuation has been successfully and extensively applied in well-being valuation by performing statistical analyses on national datasets, for instance, using the British Household Panel Survey (National Housing Federation, 2020). Richard and Nicholls' (2015) emphasis on the need for analytical accuracy has been reflected in welfare economics and Social Value UK³ calls to ensure that changes to people's experience and well-being be considered, measured and valued from the perspective of those experiencing changes. Notable studies by Watson et al. (2016) adopted a qualitative approach to investigate the importance of the experience and sociality of the building user in estimating the social return on investment (SROI). The aim was to compare the social value of selected buildings considering their physical design, design processes, organisational and building management, and the experiences of the building users. The authors found that an advantage of SROI is its capability to collate detailed qualitative as well as quantitative data in calculating the social value of a building. However, it fails to account for the value produced by the sociality of the building as the financialized social returns were inconsistent with evidence from housing occupier qualitative narratives. This underscores the need for a more holistic approach to SROI that takes the sociality of an occupier's housing environment into account and the additionality that planning practitioners could contribute to social valuation in this regard.

³ Social Value UK, 2022, more details at social value webpage on socialvalueuk.org

Based on our literature review, we argue that mental well-being as a positive state, requires improved representation in social valuation with acknowledgement of the significance of housing occupier narrative qualitative data on their lived experience, including autonomy, for the promotion of proactive wellness. In Figure 1 we present a schematic conceptual framework of the housing environment and structuration domains that shape mental well-being outcomes developed by (Emeghe, 2022), illustrating the potential contribution of planning practice as a co-agent and co-creator in the promotion of mental well-being and social value in coordinated housing provision decision-making. The housing environment domain includes both factors of housing unit characteristics and dwelling or neighbourhood unit support services and environment, and other managerial and socio-economic characteristics of residents (Ibem and Aduwo, 2013). Housing environment literacy, interacts directly with Giddens' (1984) structuration perspective of power and autonomy relations as well as residents' subjective evaluation of housing adequacy, feeding back into the structuration model and residential satisfaction. Evaluating residential satisfaction – a measure of residents' perception of the adequacy of their residential environment in meeting "their needs, expectations, and aspirations" (Ibem and Amole, 2013, pp. 565-566, 567), directly links Giddens dynamics of power relations – autonomy and human agency - to inform their significance and influence on social housing mental well-being. The approach demonstrates the potentially invaluable role of planning practice for qualitatively bridging the evidence gap between mental well-being and the autonomy of occupants in the UK social housing sector to embed sociality in value and sustainable development goals.

RTPI (2020) encouraged the development of effective partnerships between planning, the public, mental health, social care and housing providers. Given the role of statutory local planning in the identification of land to meet housing need under the influence of the government National Planning Policy Framework⁴ (NPPF) and the 'Levelling Up' agenda⁵, we propose that planning practice should be actively involved in social valuation.

⁴ The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. <https://www.gov.uk/guidance/national-planning-policy-framework/11-making-effective-use-of-land#:~:text=119,.safe%20and%20healthy%20living%20conditions>.

⁵ <https://www.gov.uk/government/organizations/department-for-levelling-up-housing-and-communities>

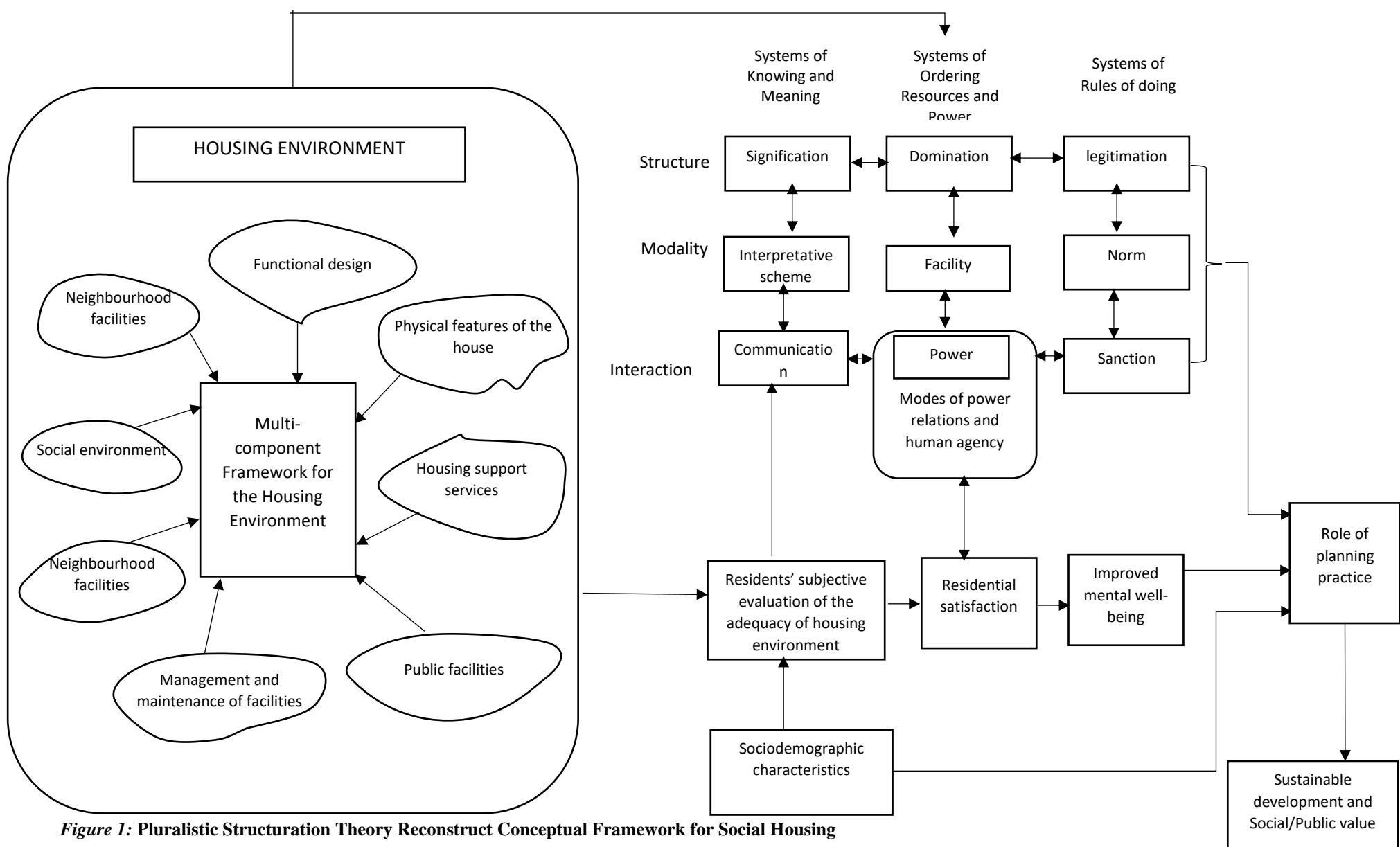


Figure 1: Pluralistic Structuration Theory Reconstruct Conceptual Framework for Social Housing

Source: Author illustration and construct - adapted from (Giddens, 1984, p. 29; Mohit and Nazyddah, 2011; Ibem and Aduwo, 2013; Abidin et al., 2019; Hutten, 2021).

Connecting planning with mental well-being: discussion and conclusion

Our review of interdisciplinary literature relevant for understanding the association between housing and mental well-being has illustrated that this is a field of study which spans multifactor variables associated with human functioning and individual life-course experiences. We identify three key themes as significant for mental well-being experienced by housing occupants: the autonomy of individuals and communities; social valuation; and decision-making coordination.

The studies considered have investigated the relationships between housing and well-being in relation to a broad range of individual and demographic, household and socioeconomic factors, and physical and psychosocial environment variables, which have relevance for the wider public realm and planning practice. While these studies provide strong evidence that housing affects the overall health of occupants, we identify an important gap in attention to mental well-being in relation to autonomy as experienced in the day-to-day lives of occupants in the UK social housing sector.

Shortly before 2010, the UK Coalition Government pledged to reduce the housing deficit by ensuring that “fairness is at the heart of those decisions so that those most in need are most protected [...] Fairness is to be ensured by the rich paying more than the poorest, not just in cash, but also as a proportion of income as well” (HM Government, 2010). Although the intention and effects of subsequent housing policy have appeared to be at best neutral between income groups, it has been regarded by some scholars as markedly unfavourable to poorer and more disadvantaged people (Tunstall, 2015). A Regulator of Social Housing (RSH) study, reported in the national press following the death of a young child from a respiratory condition caused by mould in Rochdale, Greater Manchester, found that around 240,000 social homes in England have notable or serious damp problems (The The, 2023b). A subsequent press release reported a Government Housing Secretary announcement of a campaign to encourage social housing tenants to complain about “shoddy and dangerous housing” to the landlord and, if necessary, to the housing ombudsman (The The, 2023a, p. 18). The rise of private renting is also of concern since most private housing stock has never been purpose built and evidence from the English Housing Survey⁶ suggests its condition and energy efficiency is poorer than for other tenures. TCPA (2020) noted that permitted development rights, extended by the government in planning relaxations since 2015 (office conversions to housing) and from 2020

⁶ <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/dwellingstockbytenureuk>

(repurposing from shops to homes), have had a negative impact on people's mental health and wellness. A radical shift in the present system of housing provision to address issues of housing quality and linked well-being inequity across tenures in the UK is required.

We concur with Nusbaum's (2010) study and others that the importance of autonomy in housing translates to the need for a progressive approach to provision, as illustrated in Figure 1, in order to influence health and mental well-being positively. But the components of housing autonomy that influence mental well-being, the significance of the limited autonomy of housing tenants compared with owner occupiers, and their relevance for social valuation seem to have been overlooked. The gap in qualitative research evidence and analysis must be filled to inform housing services provision in a market that is shaped by a political economy that structures housing supply, access and equity, and which is showing recent signs of increasing interest in build-to-rent social housing supply from foreign investors (British Property Federation, 2022). We argue that there is a need for a more progressive social valuation agenda that goes beyond the remit of public authority services procurement to establish coordinated government housing, planning and developer aligned expectations on definitions and methods to demonstrate mental well-being additionality in decision-making.

Planning in the UK has substantial statutory powers to control the location, use, height, form and density of specific housing developments and the public realm (Pain et al., 2020). But, its capabilities to proactively address health and mental well-being priorities have arguably been reduced by the neo-liberalization of the UK space (Agnew, 2013, p. 1), as indicated in our introduction to this paper. Associated with the roll-back of government funding and public sector social housing provision in the contemporary UK political economy, there is wide academic agreement that planning has necessarily become a co-agent in commercialized development (Forester, 1989; Jessop, 2000; Adams and Tiesdell, 2010; Halbert and Attuyer, 2016; van Loon and Aalbers, 2017, p. 221). With increased outsourcing to the private sector of not only social housing provision but local planning functions (Wargent et al., 2019), we argue there is a need for improved evidence on the social value of mental wellness to inform professional judgements in the exercise of planning discretionary regulatory and permissive powers that can help shape housing provision overall. Social valuation provides a legislative mechanism to ensure that plan-making has a duty of care to non-commercial societal outcomes of development regardless of the patchwork of local political authority policy imperatives.

But if planning is to be actively involved in social valuation, how could this happen practically? A range of planning regulatory, permissive and guidance activities directly and indirectly influence housing provision and its social value through local and neighbourhood plan-making, design codes and guides, pre-application agreements, community infrastructure levy (CIL), Section 106 agreements and development viability assessments⁷ (DVA). The social value of housing provision should underpin the determination of forthcoming locally imposed flat rate infrastructure levy charges and in the case of complex large sites, ongoing Section 106 negotiations, we argue. UKGBC (2018a; 2018b) pointed to potentials for social valuation to be used by local authorities not only to maximize developer bids but also to directly procure contractors and development team project managers and use lease clauses to increase the social benefits of development on public land and the housing built upon it.

However, central government backing would be required to ensure the consideration of the social value of housing provision in planning practice regardless of local political support for the need to do so. As the state policy framework for local plan-making, the government's NPPF planning practice guidance which underpins and elaborates ten characteristics of good design as set out in the National Model Design Code, should incorporate mental well-being considerations relevant to social value priorities in the planning system. The relevance of housing design for mental well-being equity should also be reflected in amendments to the Levelling Up and Regeneration Bill. As influential channels for government reform, recognition of the relevance of housing quality for mental well-being and social value in these linked policy frameworks would effectively embed their consideration in local planning policy and practice.

Urban planners' interdisciplinary training makes them ideally positioned to take a key role in multistakeholder collaborative decision-making to ensure that housing is located and designed with occupant health, mental well-being equity and levelling up prioritized. Furthermore, in the planning 'communicative turn' espoused by (Healey, 1996), the discipline and profession can contribute actively to political debate regarding these imperatives.

⁷ The Introduction section of latest consultation of infrastructure levy does have a comparison table on S106 and CIL. <https://www.gov.uk/government/consultations/technical-consultation-on-the-infrastructure-levy/technical-consultation-on-the-infrastructure-levy>

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Data availability

The data supporting the findings reported in this paper comprises secondary existing data. All secondary data used in this paper is openly available at locations cited in the 'References' section of this paper.

References

Abidin, N.Z., Abdullah, M.I., Basrah, N. and Alias, M.N. (2019) Residential Satisfaction: Literature Review and A Conceptual Framework. *Earth and Environmental Science*. IOP Publishing.

Adams, D., Larkham, P. and Pain, K. (2015) Viewpoint: Re-evaluating the place of urban planning history. *Town Planning Review*, 86, pp. 373-379.

Adams, D. and Tiesdell, S. (2010) Planners as market actors: rethinking state-market relations in land and property. *Planning Theory and Practice*, 11, pp. 187-207.

Agnew, J.A. (2013) Territory, politics, governance. *Territory, Politics, Governance*, 1, pp. 1-4.

Allmendinger, P. and Haughton, G. (2013) The Evolution and Trajectories of Neoliberal Spatial Governance: 'neoliberal' episodes in planning. *Planning Practice and Research*, 28, pp. 6-26.

Antonovsky, A. (1987) *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco, California: Jossey-Bass.

APA (2015) What is Mental Illness? *Patients and Families*. Updated August 2018 ed. Washington: American Psychiatric Association.

Austin, D.M., Furr, L.A. and Spine, M. (2002) The Effects of Neighbourhood Conditions on Perceptions of Safety. *Journal of Criminal Justice*, 30, pp. 417-427.

Ball, M. (1983) *Housing Policy and Economic Power: The Political Economy of Owner Occupation*. London: Methuen.

Ball, M. (1986) Housing analysis: Time for a theoretical refocus? *Housing Studies*, 1, pp. 147-166.

Baum, A. and Davis, G.E. (1980) Reducing the stress of high-density living: An architectural intervention. *Journal of Personality and Social Psychology*, 38, pp. 471-481.

Baum, A. and Valins, S. (1979) Architectural Mediation of Residential Density and Control: Crowding and The Regulation of Social Contact. In: Berkowitz, L. (ed.) *Advances in Experimental Social Psychology*. Academic Press.

Bond, L., Kearns, A., Mason, P., Tannahill, C., Egan, M. and Whitely, E. (2012) Exploring the relationships between housing, neighbourhoods and mental wellbeing for residents of deprived areas. *BMC Public Health*, 12, pp. 1-14.

Bonnefoy, X. (2007) Inadequate Housing and Health: An Overview. *International Journal of Environment and Pollution*, 30, pp. 411-429.

Bratt, R.G. (2002) Housing and Family Well-being. *Housing Studies*, 17, pp. 13-26.

Burchardt, T., Evans, M. and Holder, H. (2013) Public policy and inequalities of choice and autonomy. London School of Economics, London: Centre for Analysis of Social Exclusion.

Campbell, S. (2002) Reviewed Work(s): Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self by Catriona MacKenzie and Natalie Stoljar. *Hypatia*, 17, pp. 165-168.

CIEH (2017) Policy: Housing on Public Health. London: The Chartered Institute of Environmental Health.

Clark, J. and Kearns, A. (2012) Housing Improvements, Perceived Housing Quality and Psychosocial Benefits From the Home. *Housing Studies*, 27, pp. 915-939.

Crook, A.D.H. (1986) Privatisation of housing and the impact of the Conservative Government's initiatives on low-cost homeownership and private renting between 1979 and 1984 in England and Wales: 1. The privatisation policies. *Environment and Planning A*, 18, pp. 639-659.

Dawkins, C.J. (2017) Autonomy and Housing Policy. *Housing, Theory and Society*, 34, pp. 420-438.

Dong, H.W. and Qin, B. (2017) Exploring the link between neighborhood environment and mental wellbeing: A case study in Beijing, China. *Landscape and Urban Planning*, 164, pp. 71-80.

Donnelly, P.G. (1989) Individual and Neighbourhood Influences on Fear of Crime. *Sociological Focus*, 22, pp. 69-85.

Egan, M., Tannahill, C., Petticrew, M. and Thomas, S. (2008) Psychosocial risk factors in home and community settings and their associations with population health and health inequalities: a systematic meta-review. *BMC Public Health*, 8, pp. 239.

Emeghe, I.J. (2022) *Housing Quality, Agency, and Mental Well-Being: Examining the Social Value of Investing in Housing Quality in the United Kingdom – A Case Study Approach*. Doctor of Philosophy, University of Reading.

England, N. (2019) Putting Health into Place: Executive summary. [Accessed July 2022].

Evans, G., Lepore, S., Shejwal, B. and Palsane, M. (1998) Chronic Residential Crowding and Children's Well-being: An Ecological Perspective. *Child Development*, 69, pp. 1514-23.

Evans, G.W. (2003) The Built Environment and Mental Health. *Journal of Urban Health*, 80, pp. 536-555.

Evans, G.W., Lepore, S.J. and Allen, K.M. (2000) Cross-Cultural Differences in Tolerance for Crowding: Fact or Fiction? . *Journal of Personality and Social Psychology*, 79, pp. 204-210.

Evans, G.W., Lercher, P., Meis, M., Ising, H. and Kofler, W.W. (2001) Community noise exposure and stress in children. *The Journal of the Acoustical Society of America*, 109, pp. 103-107.

Federation, B.P. (2022) *Delivering a Step Change in Affordable Housing Supply*. United Kingdom: British Property Federation.

Federation, N.H. (2020) Measuring social value: An introductory guide for housing associations. London: National Housing Federation.

Foley, L., Prins, R., Crawford, F., Humphreys, D., Mitchell, R., Sahlqvist, S., Thomson, H., Ogilvie, D. and team, M.s. (2017) Effects of living near an urban motorway on the wellbeing of local residents in deprived areas: Natural experimental study. *PLoS One*, 12, pp. e0174882.

Forester, J. (1989) Understanding Planning Practice. In: Forester, J. (ed.) *Planning in the Face of Power*. Berkeley: University of California Press.

Foucault, M. (1986) The Subject and Power. In: H. L. Dreyfus & P. Rabinow (eds.) *Michel Foucault: Beyond Structuralism and Hermeneutics*. Brighton: Harvester.

Francisco, P.W., Jacobs, D.E., Targos, L., Dixon, S.L., Breysse, J., Rose, W. and Cali, S. (2017) Ventilation, indoor air quality, and health in homes undergoing weatherization. *Indoor Air*, 27, pp. 463-477.

Frumkin, H. (2001) Beyond Toxicity: Human Health and the Natural Environment. *American Journal of Preventive Medicine*, 20, pp. 234-240.

Fujiwara, D. (2013) The Social Impact of Housing Providers. London: Housing Associations' Charitable Trust.

Fujiwara, D., Kudrna, L. and Dolan, P. (2014) Quantifying and Valuing the Well-being Impacts of Culture and Sport. United Kingdom: Department of Culture, Media and Sport.

Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.

Government, H. (2010) The Coalition: our programme for government ('The Coalition agreement'). London: HM Government.

Guite, H.F., Clark, C. and Ackrill, G. (2006) The impact of the physical and urban environment on mental well-being. *Public Health*, 120, pp. 1117-1126.

Halbert, L. and Attuyer, K. (2016) The financialisation of urban production: Conditions, mediations and transformations. *Urban studies*, 53, pp. 1347-1361.

Hall, P. (2014) *Cities of Tomorrow: An Intellectual History of Urban Planning and Design since 1880*. Chichester: Wiley Blackwell.

Halpern, D. (1995) *Mental Health and the Environment: More Bricks than Mortar?* London: Taylor and Francis Ltd.

Handy, S.L., Boarnet, M.G., Ewing, R. and Killingsworth, R.E. (2002) How the Built Environment Affects Physical Activity: Views from Urban Planning. *American Journal of Preventive Medicine*, 23, pp. 64-73.

Healey, P. (1996) The communicative turn in planning theory and its implications for spatial strategy formation. *Environment and Planning B Planning and Design*, 23, pp. 217-234.

Hillier, W. and Hanson, J. (1984) *Social Logic of Space*. New York: Cambridge.

Hopton, J.L. and Hunt, S.M. (1996) Housing conditions and mental health in a disadvantaged area in Scotland. *Journal of Epidemiology and Community Health*, 50, pp. 56-61.

Howden-Chapman, P., Matheson, A., Crane, J., Viggers, H., Cunningham, M., Blakely, T., Cunningham, C., Woodward, A., Saville-Smith, K., O'Dea, D., Kennedy, M., Baker, M., Waipara, N., Chapman, R. and Davie, G. (2007) Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ*, 334, pp. 460.

Howden-Chapman, P., Pierse, N., Nicholls, S., Gillespie-Bennett, J., Viggers, H., Cunningham, M., Phipps, R., Boulic, M., Fjallstrom, P., Free, S., Chapman, R., Lloyd, B., Wickens, K., Shields, D., Baker, M., Cunningham, C., Woodward, A., Bullen, C. and Crane, J. (2008) Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *BMJ*, 337, pp. a1411.

Hutten, D. (2021) *The effects of the sale of entire social housing complexes to commercial investors on the residential satisfaction of tenants: A case study of the sale of social housing stock from the housing investment fund (WIF) to commercial investors*. MSc Socio-Spatial Planning, University of Groningen.

Hyndman, S.J. (1990) Housing Dampness and Health amongst British Bengalis in East London. *Social Science and Medicine*, 30, pp. 131-141.

Ibem, E.O. and Aduwo, E.B. (2013) Assessment of residential satisfaction in public housing in Ogun State, Nigeria. *Habitat International*, 40, pp. 163-175.

Ibem, E.O. and Amole, D. (2013) Residential satisfaction in public core housing in Abeokuta, Ogun State, Nigeria. *Social Research Indicators*, 113, pp. 563-581.

Ilesanmi, A.O. (2012) Housing, Neighbourhood Quality and Quality of Life in Public Housing in Lagos. *International Journal for Housing Science*, 36, pp. 231-240.

Imbroscio, D.L. (2006) Shaming the Inside Game: A Critique of the Liberal. *Urban Affairs Review*, 42, pp. 224-248.

Jackson, L.E. (2003) The Relationship of Urban Design to Human Health and Condition. *Landscape and Urban Planning*, 64, pp. 191-200.

Jessop, B. (2000) The Dynamics of Partnership and Governance Failure. In: Stoker, G. (ed.) *The New Politics of Local Governance in Britain*. Britain, Basingstoke: Macmillan.

Jones-Rounds, M.L., Evans, G.W. and Braubach, M. (2014) The Interactive Effects of Housing and Neighbourhood Quality on Psychological Well-being. *Journal of Epidemiology and Community Health*, 68, pp. 171-175.

Julliard, K., Klimenko, E. and Jacob, M.S. (2006) Definitions of health among healthcare providers. *Nursing Science Quarterly*, 19, pp. 265-271.

Kaplan, R.M., Sallis, J.F. and Patterson, T.L. (1993) *Health and Human Behavior*. McGraw-Hill.

Kearns, A., Whitley, E., Bond, L. and Tannahill, C. (2012) The Residential Psychosocial Environment and Mental Wellbeing in Deprived Areas. *International Journal of Housing Policy*, 12, pp. 413-438.

Kearns, A., Whitley, E., Mason, P., Petticrew, M. and Hoy, C. (2011) Material and meaningful homes: mental health impacts and psychosocial benefits of rehousing to new dwellings. *International Journal of Public Health*, 56, pp. 597-607.

Kegan, R. (1994) *In over our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.

Keyes, C.L., Shmotkin, D. and Ryff, C.D. (2002) Optimizing well-being: the empirical encounter of two traditions. *Journal of personality and social psychology*, 82, pp. 1007-1022.

Knox, P. and Pain, K. (2010) Globalization, neoliberalism and international homogeneity 428 in architecture and urban development. *Informationen zur Raumentwicklung* 5/6, pp. 417-428.

Kunstler, J.H. (1996) *Home from Nowhere: Remaking our Everyday World for the Twenty-first Century*. New York: Simon and Schuster.

Kuo, F.E., Sullivan, W.C., Coley, R.L. and Brunson, L. (1998) Fertile Ground for Community: Inner-City Neighbourhood Common Spaces. *American Journal of Community Psychology*, 26, pp. 823-851.

Kymlicka, W. (1989) *Liberalism, Community, and Culture*. Oxford: Clarendon Press.

Lawrence, R.J. (1995) Housing Quality: An Agenda for Research. *Urban Studies*, 32, pp. 1655-1664.

Lawrence, R.J. (2009) People-Environment Studies—A Critical Review. *ISA International Housing Conference*. Glasgow.

Lepore, S.J., Evans, G.W. and Schneider, M. (1991) The Dynamic Role of Social Support in the Link between Chronic Stress and Psychological Distress. *Journal of Personality and Social Psychology*, 61, pp. 899-909.

Lercher, P., Evans, G., Meis, M. and Kofler, W. (2002) Ambient neighbourhood noise and children's mental health. *Occupation, Environment and Medicine*, 59, pp. 380-386.

Lerman, S. (1979) Neighbourhood Choice and Transportation Services. *Studies in Urban Economics*. New York: Academic Press.

Lowry, S. (1991) *Health and Housing*. London: British Medical Journal Publishing.

Macmillan, A., Davies, M., Shrubsole, C., Luxford, N., May, N., Chiu, L.F., Trutnevye, E., Bobrova, Y. and Chalabi, Z. (2016) Integrated decision-making about housing, energy and wellbeing: a qualitative system dynamics model. *Environmental Health*, 15, pp. 23-34.

Makinde, O.O. (2016) Evaluating public housing quality in Ogun State, Nigeria. *Environment, Development and Sustainability*, 19, pp. 1879-1909.

Mansourian, B.P.e. (2009) *Global Perspectives in Health*. Oxford: Encyclopaedia of Life Support Systems (EOLSS) Publishers Co. Ltd.

Marais, L., Sharp, C., Pappin, M., Lenka, M., Cloete, J., Skinner, D. and Serekoane, J. (2013) Housing conditions and mental health of orphans in South Africa. *Health Place*, 24, pp. 23-29.

Maxwell, L. (1996) Multiple Effects of Home and Daycare Crowding. *Environment and Behaviour*, 28, pp. 494-511.

MHCLG (2020) Housing Statistical Release. London: HMSO.

Mill, J.S. (1956) *On Liberty*. Indianapolis: Bobbs-Merrill Company.

Mohit, M.A. and Nazyddah, N. (2011) Social housing programme of Selangor Zakat Board Of Malaysia and housing satisfaction. *Journal of Housing and the Built Environment*, 26, pp. 143-164.

Nagase, M. (2012) Does a Multi-Dimensional Concept of Health Include Spirituality? Analysis of Japan Health Science Council's Discussions on WHO's 'Definition of Health' (1998). *International Journal of Applied Sociology*, 2, pp. 71-77.

Nasir, A., Chaudhry, A.G., Khalid, Z. and Jabbar, A. (2015) An Anthropological Investigation of Urban Life and Health Hazard. *Science International (Lahore)*, 27, pp. 647-649.

Neuman, B.M. (1990) Health as a Continuum Based on the Neuman Systems Model. *Nursing Science Quarterly*, 3, pp. 129-135.

Newman, S.J. (2001) Housing Attributes and Serious Mental Illness: Implications for Research and Practice. *Psychiatric Services*, 52, pp. 1309-1317.

Nusbaum, L.E. (2010) *How the elder co-housing model of living affects residents' experience of autonomy: A Self-Determination Theory Perspective*. Doctor of Psychology, Wright Institute Graduate School of Psychology.

ODPHP (2018) Social Determinants of Health. United States: United States Department of Health and Human Services.

Office, C. (2015) Social Value Act Review. London: OGL.

Ogunba, O.A. (2013) Environmental Valuation. *Principles and Practice of Property Valuation in Nigeria: Determinants of Property Values*. Ibadan, Nigeria: Atlantis Books.

Oshana, M. (2006) *Personal Autonomy in Society*. Burlington, Vermont: Ashgate Publishers.

Packer, C.N., Stewart-Brown, S. and Fowle, S.E. (1994) Damp Housing and Adult Health: Results from a Lifestyle Study in Worcester, England. *Journal of Epidemiology and Community Health*, 48, pp. 555-559.

Pain, K., Black, D., Blower, J., Grimmond, S., Hunt, A., Milcheva, S., Crawford, B., Dale, N., Doolin, S., Manna, S., Shi, S. and Pugh, R. (2018) Supporting smart urban growth: successful investing in density. Urban Land Institute.

Pain, K., Shi, S., Black, D., Blower, B., Grimmond, S., Hunt, A., Milcheva, S., Crawford, B., Dale, N., Doolin, S. and Manna, S. (2020) Real estate investment and urban density: Exploring the PUR territorial governance agenda using a topological lens. *Territory, Politics, Governance*, pp. 1-20.

Parsell, C. (2016) Surveillance in supportive housing: Intrusion or autonomy? *Urban Studies*, 53, pp. 3189-3205.

Parson, D. (1987) Housing and Autonomy: Theoretical Perspectives on Non-statist Movements. *Housing Studies*, 2, pp. 170-176.

Pederson, E. (2015) City dweller responses to multiple stressors intruding into their homes: noise, light, odour, and vibration. *International Journal of Environmental Research and Public Health*, 12, pp. 3246-3263.

Petrova, S., Gentile, M., Makinen, I.H. and Bouzarovski, S. (2013) Perceptions of thermal comfort and housing quality: exploring the microgeographies of energy poverty in Stakhanov, Ukraine. *Environment and Planning A*, 45, pp. 1240-1257.

Putnam, R.D. (2001) *Bowling alone: the collapse and revival of American community*. New York: Touchstone.

Raz, J. (1986) *The Morality of Freedom*. Oxford: Clarendon Press.

Richards, A. and Nicholls, J. (2015) A discussion document on the valuation of social outcomes. In: Richards, A. & Nicholls, J. (eds.). United Kingdom: Social Value International.

Roswall, N., Hogh, V., Envold-Bidstrup, P., Raaschou-Nielsen, O., Ketzel, M., Overvad, K., Olsen, A. and Sorensen, M. (2015) Residential exposure to traffic noise and health-related quality of life--a population-based study. *PLoS One*, 10, pp. e0120199.

RTPI (2020) Mental Health and Town Planning: Building in resilience. *RTPI Practice Advice*. London: Royal Town Planning Institute.

Ruffino, P. and Jarre, M. (2021) Appraisal of cycling and pedestrian projects. *Advances in Transport Policy and Planning*, 7, pp. 165-203.

Sarafino, E.P. (2002) *Health Psychology: Biopsychosocial Interactions*. New York: John Wiley and Sons.

Sarkar, C., Webster, C. and Gallacher, J. (2014) *Healthy Cities: Public health through urban planning*. Cheltenham: Edward Elgar.

Saylor, C. (2004) The Circle of Health: A Health Definition Model. 22, pp. 97-115.

Sidney, J.A., Jones, A., Coberley, C., Pope, J.E. and Wells, A. (2017) The well-being valuation model: a method for monetizing the nonmarket good of individual well-being. *Health Service Outcomes Research Methodology*, 17, pp. 84-100.

Skogan, W.G. and Maxfield, M.G. (1981) *Coping with Crime*. Newbury Park, CA: Sage.

Spicker, P. (2017) Housing and Urban Policy, An Introduction to Social Policy. Available: <http://spicker.uk/social-policy/housing.htm> [Accessed 07 November 2017].

Sutcliffe, A. (1981) Why planning history? *Built Environment*, 7, pp. 65.

TCPA (2015) Public Health in Planning: Good Practice Guide. London: Town and Country Planning Association.

TCPA (2020) The Healthy Homes Bill. London: Town and Country Planning Association.

The Times (2023a) Complain about dangerous homes, social tenants urged. *The Times*, 06 March.

The Times (2023b) Damp blights 1 in 20 social housing homes. *The Times*, 02 February.

Thomas, H., Weaver, N., Patterson, J., Jones, P., Bell, T., Playle, R., Dunstan, F., Palmer, S., Lewis, G. and Araya, R. (2007) Mental health and quality of residential environment. *Br J Psychiatry*, 191, pp. 500-505.

Thomas, R., Evans, S., Huxley, P., Gately, C. and Rogers, A. (2005) Housing Improvement and Self-Reported Mental Distress among Council Estate Residents. *Social Science and Medicine*, 60, pp. 2773-2783.

Thompson, C.W. (2011) Linking Landscape and Health: The Recurring Theme. *Landscape and Urban Planning*, 99, pp. 187-195.

Treasury, H. (2022) The Green Book. England: Central Government Guidance on Appraisal and Evaluation.

Trotter, L. (2013) Understanding Well-being Valuation. [Accessed 20 February 2018].

Tse, R.T.C. and Love, P.E.D. (2000) Measuring Residential Property Values in Hong Kong. *Journal of Property Management*, 18, pp. 366-374.

Tunstall, R. (2015) The Coalition's Record on Housing: Policy, Spending and Outcomes 2011-2015. Social Policy in a Cold Climate-Working Paper.

Tweed, E., McCann, A. and Arnot, J. (2017) Foundations for Well-being: Reconnecting Public Health and Housing. A Practical Guide to Improving Health and Reducing Inequalities. Scotland: Health and Advisory Group, Scottish Public Health Network

UKGBC (2018a) Driving sustainability in new homes: A resource for local authorities. Version 1 ed. England: UKGBC, UK Green Building Council.

UKGBC (2018b) Social value in new development: An introductory guide for local authorities and development teams. United Kingdom: UK Green Building Council.

van Loon, J. and Aalbers, M.B. (2017) How real estate became 'just another asset class': the financialization of the investment strategies of Dutch institutional investors. *European Planning Studies*, 25, pp. 221-240.

Vine, J., Rallings Adams, M.-K., Knudsen, C., Lawton, R. and Fujiwara, D. (2017) Valuing Housing and Local Environment Improvements using the Well-being Valuation Method and the English Housing Survey: Results and Guidance Manual.

Wakely, P. (2014) Urban public housing strategies in developing countries: whence and whither paradigms, policies, programmes and projects. London: Development Planning Unit - Bartlett, University College, London.

Wall, S. (1998) *Liberalism, Perfectionism, and Restraint*. Cambridge: Cambridge University Press.

Ware, J.E. (1987) Standards for validating health measures: Definition and content. *Journal of Chronic Diseases*, 40, pp. 473-480.

Wargent, M., Parker, G. and Street, E. (2019) Public-private entanglements: consultant use by local planning authorities in England. *European Planning Studies*, 28, pp. 192-210.

Watson, K.J., Evans, J., Karvonen, A. and Whitley, T. (2016) Capturing the social value of buildings: The promise of Social Return on Investment (SROI). *Building and Environment*, 103, pp. 289-301.

Watts, B. and Blenkinsopp, J. (2021) Valuing Control over One's Immediate Living Environment: How Homelessness Responses Corrode Capabilities. *Housing, Theory and Society*, pp. 1-18.

Weich, S., Blanchard, M., Prince, M., Burton, E., Erens, B. and Sproston, K. (2002) Mental health and the built environment: cross-sectional survey of individual and contextual risk factors for depression. *Br J Psychiatry*, 180, pp. 428-433.

Wellman, C.H. (2003) The Paradox of Group Autonomy. *Social Philosophy and Policy*, 20, pp. 265-285.

WHO (1948) Constitution. Geneva: World Health Organisation.

WHO (2003) *Social Determinants of Health: The Solid Facts*. Copenhagen: World Health Organisation.

Wijburg, G. and Waldron, R. (2020) Financialised Privatisation, Affordable Housing and Institutional Investment: The Case of England. *Critical Housing Analysis*, 7, pp. 114-129.

Wilkinson, D. (1999) Poor Housing and Ill Health: A Summary of the Research Evidence. Edinburgh: Housing Research Branch, the Scottish Office Central Research Unit.

Young, M. and Wilmott, P. (2011) *Family and Kinship in East London*. London: Routledge.

Zhu, L.Y. and Shelton, G.G. (1996) The Relationship of Housing Costs and Quality to Housing Satisfaction of Older American Homeowners: Regional and Racial Differences. *Housing and Society*, 23, pp. 15-35.

Zuniga-Teran, A.A., Orr, B.J., Gimblett, R.H., Chalfoun, N.V., Guertin, D.P. and Marsh, S.E. (2017) Neighbourhood Design, Physical Activity, and Well-being: Applying the Walkability Model. *International Journal of Environmental Research and Public Health.*, 14, pp. 76.