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Health geographies II: Resilience, health and place

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Abstract

Resilience means doing well in the context of difficulty; it is both process and outcome, individual and collective, and it relates to inequities because it is about accessing resources. Resilience helps understand and improve health and wellbeing because it incorporates adversity and challenges. In this report, I argue resilience is also inherently geographical, and operates at interconnected scales. I highlight health geographers are well-placed to help understand and enhance resilience through critically-aware and contextualized approaches. Moreover, resilience offers a way to connect and further develop health geographical scholarship on both wellbeing and addressing health and other inequalities.

Keywords

Resilience, place, scale, health, wellbeing, inequities, resources, critical

I Introduction

Resilience means positive development or doing well in the context of challenges, the ability to bounce back from adversity (Masten, 2001) or to live-on in the context of flux and uncertainty (MacLeavy et al., 2021; Wild et al., 2011; Wiles et al., 2012). The concept is helpful because it emphasizes negotiation and process, as well as the reality of adversity. Rather than being actors making rational choices, people are always developing experimental strategies for living in an uncertain world (MacLeavy et al., 2021). Resilience is both process and outcome; something individuals and communities are constantly *doing* and striving towards (Ungar, 2021). Resilience is also individual and collective; we should consider the resilience of groups as well as individuals, and as an attribute of systems allowing flex and adaptation to unpredictable circumstances. The resilience of individuals, groups and systems is shaped by (and shapes) the ability to access, engage and deploy resources (Windle, 2011). This means resilience is inherently political. Resources encompass material, social, political or discursive resources, and dynamically complex and inequitable interactions of power and control (e.g. oppression, colonialism, racism, poverty, privileges and resistance). Adversity may be external to an individual or group, or internal; it may also be a long-term or slowly-accruing issue or a short, acute or abrupt shock (Wiles, 2020). Resilience also operates and is experienced at the micro-, meso- and macro-scales, including individuals, but also households, neighbourhoods and communities, regions and beyond (Wild et al., 2011; Wiles et al., 2012; Wiles, 2020). Place is thus a key element of

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resilience through place-based resources and as a resource in itself (Wiles et al., 2017).

Early on, the concept of resilience was championed by psychologists, focussing on micro-scale individual factors that characterize or contribute to resilience, like coping, grit or a positive attitude (Masten, 2001; Ungar, 2011). At the macro-scale, theorists consider the capacity of systems to adapt to challenges and changes at different system or collective levels (Coulson et al., 2020). For example, how does a system maintain quality health-care (Wiig et al., 2020), or communities cope with sudden or ongoing change (Tschakert et al., 2017)?

Resilience can be toxic if we focus exclusively on individual characteristics and behaviours, or locate responsibility solely with individuals and groups (Penihara et al., 2014). This often means failing to attend to the resources that enable or constrain individuals and communities to do well in the context of adversity (Wiles, 2020). Conversely, focussing exclusively on macro-level systems does not account for the agency and resourcefulness of individuals and groups, for the particularities of places, or for multi-scalar environmental interactions with individual and collective health. A narrowly focused approach to resilience, at either micro- or macro-scales, maintains rather than overcoming existing forms of social and spatial injustice (see Mahdiani and Ungar, 2021).

Increasingly, researchers are adopting multi-level, transdisciplinary approaches to resilience that are attentive to time (past, present, future), scale and place (Coulson et al., 2020; Wister and Cosco, 2020). There is also growing health geography work and opportunities to understand resilience at the meso-scale and connect this to micro- and macro-level resilience. Critically-informed and situated approaches to resilience offer opportunities to understand the complexities of health, and also how to support and enhance the wellbeing of individuals, groups, neighbourhoods and regions, and communities.

In this report, I argue that health geographers are well-placed to develop situated, critically meaningful and ultimately impactful approaches to understanding and enhancing resilience and health. Health geographers have much to offer in conceptualizing, measuring and understanding the role of place and the social, physical and discursive environments and resources contributing to resilience (or lack of it) (Elliott, 2018; McLafferty, 2020). I explore relevant work by health geographers which already contributes place-focused, multi-scalar lenses to understanding resilience (Rishworth and Elliott, 2019). Further, I argue that in the context of abrupt and ongoing challenges, including the global financial crisis, inflation, inequities, COVID-19, war and climate change, understanding and enhancing resilience in and through place is a practical and urgently needed project. It moves us well beyond simply understanding and measuring wellbeing, at the same time as insisting on including adversity, inequity and challenge in the context of socio-ecological models of health. Finally, I argue that critically-informed methodological approaches and considerations are needed to underpin this project.

II Health geography and situated resilience

Health geographers are developing dynamic conceptualizations to understand and measure the cumulative and causal impact of place for individual health over time (Pearce, 2018; Kwan, 2018; Dearden et al., 2019). For example, Lucy Prior et al. (2019) propose 'exposomic' health geographies to engage with biodata resources across large-scale social surveys. These would provide more-than-individual social perspectives, informed by better understanding of place. Longitudinal spatial work establishes the cumulative impact of place over the entire life course from childhood to old age, showing how residing in socially-disadvantaged neighbourhoods in childhood was detrimental to mental health outcomes at age 70 (Pearce et al., 2018). Sarah Curtis and colleagues' (2019) work with UK longitudinal spatial data shows how, even controlling for other determinants of health (ethnicity, age, home ownership, employment), changes in local employment conditions over time have significant associations with onset of new long-term illness. In other research, they demonstrate how wellbeing improved less overall for those living in more disadvantaged areas over 5 years (Curtis et al., 2020).

Combinations of salutogenic or pathogenic attributes and resources of places (like alcohol-outlet

or gambling venue density, access to services, housing quality and type or access to public transport or green-space) contribute to resilience by reinforcing or preventing positive health and social outcomes including equity. Hannah Badland and Jamie Pearce (2019) use an environmental justice lens to show how urban resources are 'equigenic' or able to disrupt the usual relationship between economic disadvantage and poor health outcomes and reduce inequities. For example, high-quality school environments have disproportionately positive effects for socio-economically disadvantaged children. There is growing evidence for the value of place-based resources to support individual and collective resilience; this also provides an evidence-base supporting decisions about the most appropriate spatial scale at which to introduce interventions. For example, qualitative research on fuel poverty in Australia (Waitt and Harada, 2019) and Hong Kong (Fong and O'Sullivan, 2021) offers insights into the material and emotional dimensions of tenants' efforts to manage energy bills at home through thrifty consumption practices around heating, cooling or using appliances or hot water. These studies emphasize the power imbalances between tenants and landlords and the urgency for stronger government policies around energy costs and housing to protect tenants (Bates et al., 2019). Enhancing wellbeing and addressing inequities by targeting particular workplaces or neighbourhoods to increase social cohesion or quality of green-space provides additional benefits for reducing inequalities than universal delivery (Dearden et al., 2019). Alternatively, enhancing resilience could mean prioritizing and targeting resources such as improving housing conditions in entire regions to narrow inequities in health (Gu et al., 2020) or improving the accessibility and availability of resources and perceptions of local built environments to improve health outcomes (Cereijo et al., 2022; Pearson et al., 2021).

As an intervention to enhance resilience, increasing social cohesion and connectedness shapes many health, social and wellbeing outcomes. Innovative specific approaches to enhance connectedness include supported interactions in 'risky but potentially fruitful public spaces' to help individuals with mental illness develop social skills during reentry from prison (Kriegel et al., 2021). A growing movement of partnerships between social workers and public libraries seeks to support people with high and complex needs and the increasing work of care for library staff (Schloffel-Armstrong et al., 2021). Work on 'third spaces' (such as libraries, gyms and pools, malls, coffee shops or parks) suggests that these also contribute to health and wellbeing for both children and older people, for example, as accessible destinations for walks and sites of familiarity and sociability (Finlay et al., 2019). Peiling Zhou and colleague's (2021) relational framework of urban open spaces as 'therapeutic public spaces' conceptualizes how places like parks also facilitate collective identity and collaboration among older people, and illuminate older people's contributions to 'age-friendly' cities.

Yet, place-centred interventions to enhance resilience are complex. Changes to contextual environments over time influence where people live, work and play, thus impacting composition through displacement and/or a pulling-up effect (Curtis et al., 2020; Kwan, 2018; McLafferty, 2020). Simultaneously, systematic racism or oppression, or privileging, shape the availability and quality of resources and amenities over time in different places. Place-focused resilience research agendas need to incorporate temporal as well and more geographically granular and disaggregated information, along with big or aggregate data to understand the complex interaction of people and places over time (Schnake-Mahl et al., 2020). This is especially important for understanding the impact of change and interventions to enhance wellbeing of the most vulnerable as well as the most privileged. Isabelle Anguelovski et al.'s (2020) mixed-methods comparative case-study of Boston and Barcelona explores the impact of making neighbourhoods greener, more liveable and more walkable. Their examination of the socio-spatial dynamics of these interventions identifies negative mental and physical health outcomes and impacts on services, and displacement of socially-vulnerable long-term residents who experience opportunities fading away, feelings of not belonging, and increasing social isolation, socio-cultural displacement and erasure. Jessica Finlay et al.'s (2021) mixed-methods Minneapolis-based

study probing how and where older adults participated in intellectually-stimulating neighbourhood activities indicates significant positive associations between sites such as libraries, higher education campuses or sites of arts and culture and cognitive function. However, they also show much larger size effects for better cognitive function for White compared with Black participants, underscoring racial disparities in access to health-promoting neighbourhood infrastructure and opportunities to age well in place.

A key facet of resilience is the ability to access and engage with resources, both *in* place and *of* place (such as meaningful attachment and sense of belonging). This necessitates critical attention to inequalities across and between places, and to differential accessibility of place-based resources and services (Spray et al., 2020). Experiences of resources such as walkable or cycle-able neighbourhoods or an accessible public transport system are mediated by differences including gender, age, socioeconomic resources or culture (Medeiros et al., 2021; Meher et al., 2021). For example, ableist and universalizing assumptions underpinning the design and running of transport networks have implications for the mobility and inclusion of those who do not fit the profile of the privileged 'norm' (Meher et al., 2021; Smith et al., 2021).

Gareth Griffith and Kelvyn Jones' (2020) multilevel modelling considers the dynamic interactions of age-specific relationships between place, mental wellbeing and mental illness. Their results show significant contextual effects for mental illness but even stronger contextual effects for mental wellbeing, particularly for older adults. Griffith and Jones' (2020) evidence suggests household or area-based interventions are more beneficial for wellbeing than focussing on individuals. Others explore the therapeutic influence of wilderness and access to nature, focussing on understanding the role of place and context (Milligan et al., 2021; Cheesbrough et al., 2019; Freeman et al., 2019). Key implications of this work are that place-based interventions (e.g. gardens, parks, neighbourhoods, public spaces) are valuable ways to support health and wellbeing. Yet, we must consider all the nuance of place and diversity. Biglieri and Dean (2021) and Paddon (2020) identify how apparently-therapeutic interventions or activities in green- or public spaces (such as walking to promote social connection, physical activity and engagement with place) sometimes have detrimental impacts and induce ambivalent feelings or a sense of exclusion.

One very active avenue of research for area-based interventions is improving the quality and accessibility of green- and blue-spaces. Quantity and type of green-space (e.g. tree canopy or open grass) are associated with health outcomes and healthy activities, especially cardiovascular and mental health but also cognitive wellbeing, sleep, loneliness, and physical activity or active transport (Astell-Burt and Feng, 2020; Astell-Burt et al., 2021; Nawrath et al., 2022; Zhang et al., 2020). Local green-space improves prosocial behaviour or positive interactions and physical activity in children and adolescents (Putra et al., 2021), especially for children in low-income families (McCrorie et al., 2021). Nicole van Den Bogerd et al. (2021) demonstrate how social connection and community belonging increase through collaborative interventions in built or natural environments, such as improving the quality of a local beach. Work continues to establish the relationship between green-space and wellbeing over time, how best to measure health outcomes in big data and how to define green-space (Mavoa et al., 2019; Shin et al., 2020). Bearing in mind that residential proximity and access to such spaces is often more expensive, research focused on social inequities and privileging is particularly important. This research shows the value of investing in increasing the cover and quality of urban tree canopies and access to green-spaces to address health inequities between and within neighbourhoods (Astell-Burt and Feng, 2021; Badland and Pearce, 2019; Mears et al., 2020).

Health geographers can also develop understanding of climate change impacts on the health of people and communities, and on community resilience and responses. This includes understanding the significance of place and place attachment, interactions of local with regional and global scales and changing mobilities in the context of climate change and related impacts (Harper et al., 2022; Tschakert et al., 2017). For example, Jacqueline Middleton et al.'s (2020) work on experiences of place and mental health in

Inuit communities points to the need for more culturally-specific and place-based investigations into the impacts of climate change (see also Hunter et al., 2021). Tara Quinn et al. (2020) demonstrate how community belonging and identity over time offset negative health impacts of climate-related disasters such as floods. They highlight the need to understand community-led initiatives, and how institutional responses to disasters positively and negatively affect responses at other scales. This group's work also examines the disruption to health-care systems caused by climate-related disasters, and the need for better resilience in health-care systems to be prepared to respond in future (Landeg et al., 2019). Similarly Irena Connon and Ed Hall (2021) critique the simplistic relationship between disability and vulnerability underpinning scholarship on environmental disasters. They argue for the need to recognize the capabilities and agency of people with disabilities and consider how social and environmental factors interrelate to produce vulnerabilities and enhance capabilities.

III Methodological implications and cautions for a resilient health geography agenda

Embracing the practical and urgent project of resilience has methodological implications. The work examined in this report shows the need for innovation and creativity with both new and old approaches, and new and old kinds of data, and for careful attention to inequities, power and privilege, and unintended outcomes. Yet, if we are to embrace resilience, it leads us into more transdisciplinarity, which is a generative zone of new knowledge production but means our scholarship will be less exclusively found in health geography outlets or even identified as health geography. Is this a positive or a mixed blessing?

Our own work as health geographers also has the potential to contribute to the resilience of those we work with. For example, Elliot Serjeant et al. (2021) present a phenomenological methodology including multimodal home tours as an ethically-sound and close-up way to understand the embodied and mental activities tenants perform within their homes to manage damp and mouldy rental housing. Ronan Foley et al. (2020) further highlight the value of in-situ and mobile methodologies for richer, more ethical understandings of health and place.

Our research also has the potential to reduce resilience, however, and health geographers must actively critique problematic place-based research and data. For example, Megan Davies et al. (2018) contend that in addressing the tensions between qualitative work focused on experience and embodiment and multi-level modelling to understand both individual and area-level factors, contextualized cultural (meso-level) models are more appropriate than micro-level behavioural ones. Sara McLafferty et al. (2020) caution the use of participatory approaches to volunteered geographic health information, which obscure the burden of socio-economic disparities because of who perceives and/or chooses to report issues (especially stigmatizing issues). Jessica Finlay and Brandon Finn (2021) argue for more critical scholarly engagement with the age-friendly cities movement. The latter is intended to support older citizens but tends to primarily benefit private capital through development and the neoliberal state by minimizing obligations to older citizens, and to further exacerbate inequalities for marginalized older adults. Shannon Whittaker et al. (2020) explore how scholars could mitigate the effects of spatial stigma on health without perpetuating it by addressing structural processes of power and privilege. They highlight how stigma is a tool used in the service of power to appropriate place and culture, for example, as a way to justify and 'clear the path' for urban renewal and gentrification. Terri-Leigh Aldred et al. (2021) critical commentary on reframing pathologizing narratives about Indigenous people and northern places also underlines how the narratives we collectively tell (including, and especially, as researchers) are a resource or obstacle for wellbeing. Alina Schnake-Mahl and Usama Bilal (2021) demonstrate how practices of controlling 'out' the geographical distribution of deaths and morbidity from Covid-19 in the USA led to underestimating the disproportionate burden of illness for ethnically minoritized groups, driving further inequities in responses and interventions.

IV Conclusion

In an uncertain world shaped by power-dynamics and full of challenges and adversity, people and organizations are always developing and negotiating experimental strategies to be well. Understanding adversity, and understanding and enhancing resilience in and through place and scale is a valuable focus for health geographers; building on our grounded approach to wellbeing and strongly connecting this to research on addressing inequities through place and place-based interventions.

Place itself is a key resource for resilience; moreover, many other resources that contribute to resilience can be enhanced or made more accessible with environmental or place-based interventions. As well as understanding the roles of individuals, a critically contextualized approach to resilience insists on also considering collectives, and the many kinds of resources that operate at interconnected micro-, meso- and macro-scales to enhance (or restrain) 'doing well' in the context of challenges. Geographical approaches to resilience offer contextualized, situated ways to understand and enhance the processes and resources that contribute to resilience, and what resilience itself means. Health geographers have much to offer in terms of enriching understanding, measurement and enhancement of the relationships between resilience, health and place.

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