
Environmental justice and health practices: understanding how health inequities arise at the local level

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Abstract While empirical evidence continues to show that people living in low socio-economic status neighbourhoods are less likely to engage in health-enhancing behaviour, our understanding of why this is so remains less than clear. We suggest that two changes could take place to move from description to understanding in this field; (i) a move away from the established concept of individual health behaviour to a contextualised understanding of health practices; and (ii) a switch from focusing on health inequalities in outcomes to health inequities in conditions. We apply Pierre Bourdieu's theory on capital interaction but find it insufficient with regard to the role of agency for structural change. We therefore introduce Amartya Sen's capability approach as a useful link between capital interaction theory and action to reduce social inequities in health-related practices. Sen's capability theory also elucidates the importance of discussing unequal chances in terms of inequity, rather than inequality, in order to underscore the moral nature of inequalities. We draw on the discussion in social geography on environmental injustice, which also underscores the moral nature of the spatial distribution of opportunities. The article ends by applying this approach to the 'Interdisciplinary study of inequalities in smoking' framework.

Keywords: social inequity, health practices, Bourdieu, Sen, environmental justice

Introduction

The literature on social inequalities in health behaviour is vast. Within the last 10 years or so, the interest in this area has moved from a general concern to one of considering these same inequalities in local or neighbourhood areas (Chow *et al.* 2009, Ellaway and Macintyre 2009, Frohlich *et al.* 2002). While extremely important, this research has mostly focused on detailing the extent of the inequality (understood in statistical terms). Normally this is undertaken by studying the effect of the inequality of specific social determinants, such as socio-economic status, on the inequality of outcomes (in our case, behaviour). The study of health inequality has therefore largely focused on the distribution of primary goods (mostly money, but often also education), rather than on the inequality of opportunity or the impact that this differential distribution of social determinants has on people's ability to engage, or not, in healthy behaviour.

In order to take a different approach, we start with a critique of epidemiological approaches to health behaviour, arguing that their focus on the individual and neglect of context is a major problem when it comes to understanding how behaviour comes to be socially differentiated. As a solution, we suggest moving from health behaviour, as medically defined risk factors, to health practices, as sociologically defined features of context-specific social differentiation. The move from health behaviour to health practices is discussed as a prerequisite for another substantial change necessary in inequalities research; the move from the study of the inequality of outcomes to the inequity of opportunities.

In so doing we focus on two theoretical concepts we think may offer some novelty to the current debate on the production of health inequalities with regard to health behaviour: capital interaction and capabilities. We discuss Pierre Bourdieu's capital interaction theory (Bourdieu 1977, 1986) in order to explain the importance of the distribution of structurally based resources as the basis for social inequality in health practices. We then explore Amartya Sen's capability approach (Sen 1985, 1999, 2009), which draws attention to the range of options for health-relevant agency. In bringing together Bourdieu's capital theory with the capability theory of Sen we come to see that social inequalities in health behaviour are not natural or inherent, but are unfairly socially structured and therefore mutable. This moral dimension leads us to speak of inequities rather than inequalities. Beyond a question of semantics, this change of focus helps us understand that social inequalities are not naturally occurring but socially structured and unfair phenomena. We conclude with a concrete application of these ideas in a framework from the 'Interdisciplinary study of inequalities in smoking' (ISIS), which applies these ideas to explain social inequities in health practices at the local level.

Moving from inequalities in health behaviour to inequities in health practices

Much empirical research on social inequalities in health behaviour is firmly entrenched in the social epidemiological approach; the unequal distribution of unhealthy behaviour (like smoking, drinking, eating habits and lack of exercise) is linked to unequal social conditions (most often operationalised with variables such as income, education and social support). The inability of public health to change individual behaviour on a large scale, however, despite expensive and labour-intensive large-scale interventions (for example, the multiple risk factor intervention trial), has given epidemiologists reason to pause with regard to how they view behaviour and its causes and their ability to modify it.

Indeed, certain fundamental characteristics of the epidemiological approach require rethinking social inequalities in health behaviour. Here we focus on two features most relevant for our argument; (i) epidemiologists' focus on individuals as passive disease hosts instead of active agents and (ii) the basic neglect in social epidemiology of unequal choices as a key element in the distribution of health practices.

First, we describe the problem inherent in epidemiologists' sole focus on disease. Disease can be defined as a biomedical process occurring inside the human body. Epidemiologists study its distribution and set out to identify factors that increase its probability of occurrence. Social epidemiology, by extension, can be defined by its focus on the social (risk) factors in disease causation. In social, as well as general epidemiology, the meaning attributed to individuals – as part of the complex processes in disease distribution – goes back to the established concept of humans as hosts. By defining individuals as hosts, agency is ascribed to individual biology (or at least, the ultimately decisive active part). Consequently, epidemiological approaches tend to pay little or no attention to individuals or groups of individuals as social agents in the production and reproduction of health behaviour and social inequalities. Instead

(social) epidemiological research focuses on the study of individuals as being exposed to risk or as carriers of risks. The fact that people actively manage their lives, including health issues, does not receive particular attention.

The term and concept of health practices, rather than health behaviour, is critical if we are to reintroduce agency as a social concept. A discussion of health practices allows us to focus on context-specific human agency as a key factor in understanding social inequality in health (Frohlich *et al.* 2001). In contrast, the term and concept of health behaviour, defined as individuals' actions relevant for medically defined outcomes and (potentially) causal for pathological processes inside the human body, does not fit well with such a sociological perspective.

The second problem revolves around the treatment of health inequality in the epidemiological paradigm. Health inequality research in public health took off in an important way with the first results of the legendary 1978 article entitled 'Employment grade and coronary heart disease in British civil servants' (Marmot *et al.* 1978). The Whitehall I study, begun in 1967, found, as has the subsequent Whitehall II study, a strong association between grade levels of civil servant employment and morbidity and mortality rates from a range of causes. Importantly, this gradient was only very partially explained through health behaviour.

The results from the Whitehall studies created a flurry of excitement in the nascent world of social epidemiology. The focus of these studies remained, however, on the outcome side of the equation; much emphasis was (and still is) placed on describing how unequal people are with regard to their health behaviour, morbidity and mortality, with less attention being paid to the inequitable processes leading to these health inequalities (Frohlich *et al.* 2006). This is not entirely surprising, given that epidemiology is the study of the determinants and distribution of disease, and not an area of inquiry that seeks to understand why the gradient exists.

Some of these oversights are debated in the day-to-day work of political philosophers and ethicists. These thinkers discuss issues of social inequality under the purview of equity and choice. Political philosophers concerned with issues of social inequality, for instance, have addressed the problem of the voluntariness or otherwise of behavioural choices. Many of them have suggested that this focus clouds an important consideration in the normative analysis of these 'choices'; namely, the unequal background conditions against which individuals from different social groups make decisions about what they do. These suggest that a host of external factors affects whether or not individuals start to, for instance, smoke, whether or not they attempt to quit and whether or not any such attempts are successful (Viehbeck *et al.* 2011).

The issue of choice brings us to a fundamental distinction often neglected in epidemiology; the difference between (in)equality and (in)equity. Health inequality has been defined by Margaret Whitehead (1992) as: 'measurable differences in health experience and health outcomes between different population groups – according to socioeconomic status, geographical area, age, disability, gender or ethnic group'. Health inequity, on the other hand, has a moral and ethical dimension. It refers to differences in health that are unnecessary and avoidable and in addition, are also considered unfair and unjust. Inequities include differences in opportunity for different population groups that result in, for example, unequal life chances, nutritious food and adequate housing.

But judgements on which situations are unfair will vary from place to place and time to time. One widely used criterion, however, is the degree of choice involved. Where people have little to no choice in their living and working conditions, the resulting health conditions are likely to be considered particularly unjust. Social inequities, of course, can make certain choices easy and accessible for some, but costly and difficult for others. Even if we think that individuals' choices can, in principle, justify unequal health outcomes, we must still ask whether different people's choices were made against roughly equitable background conditions (Viehbeck *et al.* 2011).

Because epidemiologists focus on the outcome side of the gradient effect they only really emphasise the unfairness of the outcome. By turning the lens from the issue of inequality to one of equity, we begin to ask why some people are better able to be healthy than others. Precisely these issues are what Marmot and the Whitehall researchers missed until they began to consider issues of distributive justice, largely through the influence of Amartya Sen (Commission on Social Determinants of Health [CSDH] 2008).

We conclude that we need a new theoretical grounding for our discussion about health practices that no longer relies solely on an epidemiological paradigm but rather, considers individuals as having agency for change. Furthermore, rather than detailing inequality in outcomes, we need to better understand how society creates inequitable chances for people based on its distributive practices. In the next section we discuss how one can apply capital and capability theory to help make such a shift.

A structure-agency perspective on health practices

There is widespread recognition today that concern with the production and reproduction of health inequalities must take into account both the social structure and individual agency to be given credence (Cockerham 2005, Frohlich *et al.* 2002, Popay *et al.* 2003, Williams 2003). Yet we suggest that this literature, while helpful in moving forward by underlining and explicating the importance of both, has left some questions open on how structure and agency are linked in the production, reproduction or reduction of inequities in health practices (Abel and Frohlich 2012). Bourdieu argues for a strong link between the possession of different forms of capital, a class-specific habitus, and the choices individuals have. The significant advancement in Bourdieu's work for our argument is that it allows us to analyse key components of social inequity that are directly relevant to agency. We argue that a closer consideration of the different forms of capital and their interactions opens a gateway to the role of the individual in the production and reproduction of inequities in health practices, thereby underscoring the relationship between structure and agency.

According to Bourdieu the inequitable distribution of structurally based resources (capitals) can be understood as part of the fundamental system of inequity in a given society; it is both the result and a key mechanism of the social reproduction of power and privilege. His concept of capital is based on distinguishing three forms: social, economic and cultural capital. These three forms of capital are interrelated and inextricably linked. A major thrust of Bourdieu's theory is his elaborate account of the interaction between these three forms of capital in everyday life and the ways in which this interaction process contributes to the reproduction of social inequities and power distribution in society (Bourdieu 1984, Swartz 1997). Since this interaction has been given little attention in health research (Abel 2008), we concentrate here on their different forms. Prior to this we briefly discuss Bourdieu's notion of economic, social and cultural capital (for more see Abel 2007, Bourdieu 1986, Williams 1995).

Bourdieu (1986) describes capital as:

Accumulated labour (in its materialized or its 'incorporated', embodied form ... It is a force inscribed in objective or subjective structures, but it is also the principle underlying the immanent regularities of the social world. (Bourdieu 1986: 241)

A critical aspect of Bourdieu's theory of capital is that no single one of the three forms of capital alone can fully explain the reproduction of social inequalities; it takes all three, and importantly, the interaction between the three to permit social inequalities to endure over time.

Economic capital (or the lack thereof) in the form of money and material assets (income, property, financial stocks), is a decisive factor in social advantage and disadvantage. It is also 'the root of all the other types of capital' (Bourdieu, 1986: 252). Social capital, from a Bourdieusian perspective, is located at the inter-individual level. As such, it refers to material and non-material resources that can be mobilised by virtue of many different kinds of social relationships. Social capital is thus understood as the:

Aggregate of the actual or potential resources which are linked to possession of a durable network of mutual acquaintance and recognition or membership in a group which provides each of its members with the backing of the collectively-owned capital. (Bourdieu 1986: 248)

Lastly, cultural capital can be broadly defined as people's symbolic and informational resources for action (Bourdieu 1986, Wacquant 1992). Cultural capital exists in three different forms: incorporated (such as skills and knowledge); objectivised (such as books, tools and bicycles) and institutionalised (such as educational degrees and vocational certificates) (Bourdieu 1986). It is acquired mostly through social learning, with learning conditions varying across social classes, status groups or milieux (Abel 2007, Swartz 1997, Veenstra 2007, Williams 1995). In the form of knowledge and skills, cultural capital is a precondition for most individual action and, as such, is a key component in people's capacity for agency, including that for health practices.

There is a high degree of complexity among capitals in their different forms. Three of these relationships (conversion, accumulation and transmission) have been discussed by Bourdieu (1986) and here we add a fourth principle of interaction we call conditionality. All four forms of interaction are important for the purposes of our argument. Firstly, the different forms of capital can be converted one into another; economic capital, in the form of money, can be invested in order to improve one's education or cultural capital. Secondly, capital in these different forms can be accumulated; money can be invested in the stock market, for instance, in order to make more money. Thirdly, the different forms of capital can be transmitted; children can inherit financial assets from parents and/or capital can be received through family socialisation; for example, when knowledge and social skills are passed on from parents to their children. Lastly, different forms of capital, in their acquisition and use, are dependent and conditional on each other. For instance, cultural capital is essential in the acquisition of social capital; certain values, communication styles and behavioural skills are expected from all those who want to belong to, and participate in, powerful social networks. The gainful use of economic capital might depend on the authorising properties of higher educational degrees and the knowledge that comes with it.

The decisive meaning of the three forms of capital and their interactions leads us to acknowledge the active role of individuals who (beyond simply owning or consuming such resources) acquire and use, in some active way, health-relevant capital. The active acquisition and development of such capital is part of agency, as is making a health-relevant use of them. In other words, in order for cultural, social and economic capital to become health promoting, individuals have to actively use them. For instance, money is spent on health-relevant practices (such as involvement in physical activity classes), support in health matters is sought out (such as by participating in self-help groups), and knowledge is applied by individuals in order for it to function actively to engender health (for instance, by making decisions about what one eats).

What is missing from Bourdieu's argument, however, is a deeper analysis, beyond a discussion of resources (or capitals), of the inequity in choice that arises from these social inequities.

In the last 10 years or so, Sen's capability theory has been proposed as being potentially important for public health action concerned with the reduction of social inequalities in health. This has recently been spearheaded by the World Health Organization (WHO) CSDH 2008) and the writings of experts like Ruger (Marmot 2010, Ruger 2010). The capability theory puts the emphasis on the empowerment of individuals to be active agents of change in their own terms both at the individual and collective levels (Ruger 2004). Central to the capability theory is the idea of 'the public as an active participant in change, rather than as a passive and docile recipient of instructions of dispensed assistance' (Sen 1999: 281). This perspective on collective activity for change allows us to link the capability theory to Bourdieu's capital theory.

The core characteristic of the capability theory is its focus on what people are effectively able to do and be; that is, on their capabilities (Robeyns 2005). Individuals' effective opportunities to undertake the actions and activities that they want to engage in are what matter. These actions and activities ('doings') together with the 'beings', or what Sen calls 'functionings', constitute a valuable life. Functionings include, but are not limited to, being healthy, being active as a community member, working, resting and being literate. The distinction between realisable and realised functionings is crucial to the capabilities approach. 'A functioning is an achievement, whereas a capability is the ability to achieve' (Sen 1987: 36). Sen puts much emphasis on the distinction between functionings and capabilities because he believes that wellbeing should not only include realised functionings, but that the ability to choose from a set of alternative functionings is a freedom *sui generis* (Sen 1999).

Sen puts great emphasis on freedom. Freedom is important to equity issues for Sen for at least two different reasons. Firstly, more freedom gives people more opportunity to pursue their objectives. It helps, for example, in their ability to decide to live as they would like and to promote the ends that they may want to advance. This aspect of freedom is concerned with people's ability to achieve what they value, no matter what the process is through which that achievement comes about (Sen 2009). Secondly, we may attach importance to the process of choice itself. We may, for example, want to make sure that people are not being forced into health practices, or are not able to behave in the way they wish, because of particular constraints.

Sen distinguishes between two types of freedom; opportunity and process (Sen 2009). When describing opportunity freedom, Sen draws on the structural constraints and opportunities that people have to make choices. The ability to be a certain way and live a certain life is confined, or not, by the options that are available for people to choose from. The process aspect, on the other hand, focuses on the true agency that people have to make their choices.

The focus of the capability approach is not just on what a person actually ends up doing (or achieving), but also whether or not she chooses freely to make use of that opportunity and what her overall options are. The focus is therefore on the ability of people to choose to live different kinds of lives within their reach, rather than confining attention only to what may be described as the culmination – or aftermath – of choice. In this sense, freedom is both structured (having collective/shared aspects) and individual. It is this inequity in capability, understood as an inequity in choice, that Sen argues is at the core of inequality in society.

Consequently, and in relation to health inequities, evaluations of social and health interventions based on the capability theory should include, on the structural side, not only the quality and quantity of available resources (or in Bourdieu's language, capitals), or the realised doings and beings on the agency side, but also the range of capabilities available to people. People's capitals will determine the range of options for health practices by shaping their capabilities. In other words we must take into account the capability sets from which individuals can draw (Sen 1993) in order to understand how inequities in health practices come about.

Environmental justice and its link to health practice inequity

Up until here our discussion has been purely theoretical. The case of environmental injustice, however, can help explain what these issues look like in our everyday lives by focusing on modern urban conditions. Urbanisation is probably the single most important demographic shift worldwide during the past and in the new century, and it represents a sentinel change from how most of the world's population has lived throughout history (Galea and Vlahov 2005). Cities such as Los Angeles, New York, London, Hong Kong, Mumbai and Rio de Janeiro now have income disparities that rank among the highest in the world. Although resources are made available to urban residents through private, public and volunteer conduits in these cities, socioeconomic inequities in cities are linked to differential access to these resources. These inequities suggest that people at different ends of the socioeconomic spectrum may have different opportunities to benefit from the resources available in cities, resulting in differentials in health practices.

One area of urban studies of particular importance to social inequities in health is that of neighbourhoods. There is increasing evidence that health practices tend to be substantially more damaging to health in areas characterised by high levels of social and economic disadvantage, relative to areas characterised by social and economic advantage (Drewnowski 2009, Pearce *et al.* 2010, Pabayo *et al.* 2011). Because where people live is the basis for health practices, their experiences of engaging in them are to a certain extent constrained or encouraged by several aspects of these areas: the physical environment, the cultural expectations about appropriate behaviour and the social experiences possible there (Fitzpatrick and LaGory 2011). Physical and social qualities of place therefore make some health practices more possible than others.

Despite this growing area of work in neighbourhoods and health, the spatial dimension has hitherto tended to be treated as a kind of fixed background, a physically formed environment that has some influence on our lives (and health) but that remains external to the social world as well as to efforts to make the world more socially just (Soja 2010). However, for certain segments of the population it seems that being in an unhealthy place is not a matter of timing or accident, but rather a function of the social structure (Fitzpatrick and Lagory 2011, Macintyre 2007); a structure that is amenable to change if the political will is present. It is also now recognised in the environmental justice literature that marginalised populations face a double burden: being individually socially marginalised and being subject to the inequities resulting from being located in poor social and physical environments (Masuda *et al.* 2010). Since cities are artificially constructed environments, that is, intentional, built environments, they should as easily be engineered to promote more desirable health outcomes (Fitzpatrick and Lagory 2011).

One area of research and advocacy that has developed to confront these issues is the environmental justice movement. In its early stages environmental justice was defined as the disproportionate exposure to and burden of harmful environmental conditions experienced by people in low socioeconomic positions (Taylor *et al.* 2006). This movement, which has since its humble beginnings become global in scope, now involves a theoretical positioning linking environmental research to debates around human rights and social equity (Masuda *et al.* 2010). In this sense, environmental justice offers a remarkably important framework for thinking about the inequitable distribution of health practices across areas.

Within this framework, cities and neighbourhoods can be considered resource spaces where the goods and services capable of protecting and enhancing the health of their residents can be more or less equitably distributed (Fitzpatrick and LaGory 2011). Urban spaces are home to

various social groups, sorted and sifted according to political and economic resources. Those with the greatest social, economic and cultural resources generally reside in areas containing the most health-promoting resources while those with the least personal resources find their access restricted to less desirable areas with the fewest health-promoting resources. As a logical conclusion, these same groups with the least exposure to health-promoting resources have health practice choices that are constrained by reduced life chances. And indeed, studies continue to show that the most socially disadvantaged neighbourhoods lack the resources necessary to promote healthy health practices (Drewnoski 2009, Fitzpatrick and LaGory 2011, Pabayo *et al.* 2011, 2012).

A new approach: ISIS

Drawing on the principles of the environmental justice movement, along with our earlier theoretical argument regarding Bourdieu and Sen, we propose a framework that moves towards an operationalisation of how inequities in health practices come about in neighbourhoods. In the past, attempts to conceptualise how neighbourhoods influence health outcomes inequitably tended to fall into the traditional epidemiological trap of treating neighbourhoods as units of analysis, rather than areas that themselves can explain how inequities arise:

Seldom ... does location itself play a real part in the analysis; it is the canvas on which events happen but the nature of the locality and its role in structuring health status and health related behaviour is neglected. (Jones and Moon 1993: 515)

The ISIS framework, developed in Montreal, Canada, is concerned with this neighbourhood canvas, how it can differentially make available and accessible resources, and how this social inequity can lead to inequities in health practices. Crucially, our framework examines inequity at work in two different ways; at an aggregate neighbourhood level, what others have called environmental injustice, and at an individual level (through the capital stock of individuals). We argue that it is at the interface of both the inequitable distribution of capitals and the inequities in neighbourhood resources that individuals' capabilities become shaped. As such, we argue, similarly to Masuda, Poland, and Baxter (2010), that marginalised populations often face a double burden: being personally socially marginalised as well as being subjected to poor quality living environments. Our framework describes how neighbourhoods can unfairly structure capabilities due to the inequitable constraints and opportunities at both the individual and collective levels. We then develop the argument as to how they interact to create inequitable health practices.

In the framework the geographical patterning of health inequities is linked to inequities in health-related resources available in one's immediate environment, the neighbourhood. In other words, neighbourhoods make available resources with a positive and/or negative valence for producing, in the case of the ISIS study, social inequities in smoking. We do not view health inequities to be a result of the inequitable distribution of resources understood as differences in the amount of resources alone. Instead we have expanded on what is meant by distribution of resources. We do not view this distribution to be an outcome understood in terms of variation in a statistical sense, but as the set of processes through which resources are spread out among neighbourhoods (Bernard *et al.* 2007). Furthermore, we argue that this inequitable distribution influences people's capabilities to access and use freely these resources for health, as described by Sen.

How resources are distributed at the neighbourhood level

In order to help operationalise how resources at the neighbourhood level might come to be inequitably distributed, we call upon a complementary theorist to the ideas of Bourdieu and Sen. In Jacques Godbout's theory of informal reciprocity (Godbout 2000) he contends that many resources are procured and exchanged outside the interventions of markets or the state. He suggests that there are three distinct sets of rules for the circulation of resources: market rules, states and networks within which informal reciprocity occurs. We extend Godbout's theory and develop the idea that availability of, and access to, resources are regulated by four rules: proximity, price, rights and informal reciprocity. These rules further give rise to five interrelated domains through which residents may acquire resources influencing smoking: the physical, economic, institutional, local sociability and community organisation domains (Bernard *et al.* 2007, Frohlich *et al.* 2008). The variable configurations of these domains in neighbourhoods, we argue, lead to the local production of inequities in smoking. Figure 1.

Specifically, the physical domain includes features of the natural and built environments such as air quality and the presence of buildings and open spaces, as well as their condition and cleanliness. Access and exposure to these resources is ruled by what we have termed proximity: people living in the same area share the same physical environment and they are thus basically exposed to the same positive and negative resources. The economic domain is ruled by the market through price mechanisms. This domain and its rules function under the economic hypothesis that parties are presumed to seek the maximisation of their own utility. Resources in this domain can therefore be obtained only if people pay for them. In the case of the ISIS study, resources such as cigarettes sold through tobacco-selling outlets would be a prime example of a market-regulated resource.

Resources made available through the institutional domain are accessed through the state via rights' mechanisms. Institutional rules regulate access to resources which citizens are entitled to according to publicly enacted rules; such entitlements are balanced against the fulfilment of citizen obligations. There is a recognised relationship between citizens who have rights and the state, which has some measure of authority. General examples of resources

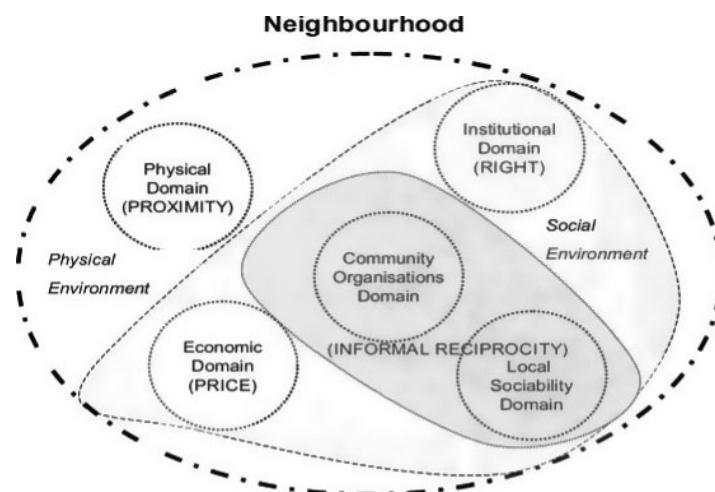


Figure 1 *Neighbourhood environments and rules of access* (Bernard *et al.* 2007). Four sets of rules (in brackets) determine access to neighbourhood resources coming from the physical as well as the social environment. The latter influence comprises four domains. Two of these domains (dark grey) obey the rule of reciprocity.

offered through this domain are schools, health clinics, shelters and childcare centres. An example of a resource provided through the institutional domain in the case of ISIS are publicly funded smoking cessation services.

The local sociability domain involves resources that can be mobilised through informal networks formed by the social links that people share. These involve non-contractual exchanges of resources outside markets and state interventions. In this domain social relationships are explicitly engaged in gift-giving, which creates obligations of reciprocity that are not specific to the contents, the target or the time frame of what has to be given back. Such resources include smoking-related norms.

Finally, the community organisation domain follows the informal reciprocity rule but includes resources provided through formally organised collective entities such as charity groups. Many of these organisations are involved in some form of collective action. Resources offered by community organisations are normally given freely by groups or individuals to other individuals, such as when community organisations organise local support groups for residents wanting to quit smoking. The critical difference between the local sociability and community organisations domains are that the former procure individuals benefits only, whereas the latter is mobilised in view of pursuing collective goals.

A final component to our framework is an understanding of the social processes that permit the transformation of these resources into health outcomes, or in our case, health practices. We argue that health is produced not only with (or without) the structural constraints and opportunities offered at the local level but, harking back to Bourdieu's and Sen's theories, through individuals' capital stock as well as their capabilities, which permit them to identify, access and choose to utilise (or not) resources in neighbourhoods to their health advantage. Essentially health practice outcomes at a local level are a function of both individuals' capitals and capabilities and the demands and opportunities of the environment (Abel 2008). Social inequities in health practices are therefore a function of the quantity, quality and accessibility of local resources and their correspondence with the forms of capital that residents have at their disposal, the interaction of which will yield inequitable capabilities. Figure 2.

We therefore suggest that inequity goes beyond just the unequal distribution of capital. Social inequity also exists in the chances, choices and ability for people to have the different forms of capital consistently support and complement each other with the end result of their interaction being a health advantage. And this is where the two levels of inequity become of critical importance. At the individual level, capitals provide the agency potential for health when matched with capability. However, this potential is contingent on resources being available and accessible within a neighbourhood. So, for instance, an individual might have the cultural capital that would lead you to value jogging, but if your neighbourhood is too dangerous to jog in (whether this be due to traffic, stray dogs or human-caused violence), your capital may not be actualised due to your reduced capability.

Conclusion

Our article began with a critique of current social epidemiological approaches to studying social inequalities in health behaviour. We argue that if we desire to understand how health practices come to be inequitably distributed we need to have a greater theoretical understanding of two things: (i) what social factors are inequitably distributed that lead people to behave in differential ways and (ii) how these social factors interact with people's agency to bring about differential capabilities to act in health promoting ways. We turned to Pierre Bourdieu's capital theory to give guidance on the composition of social inequality, the three capitals, and

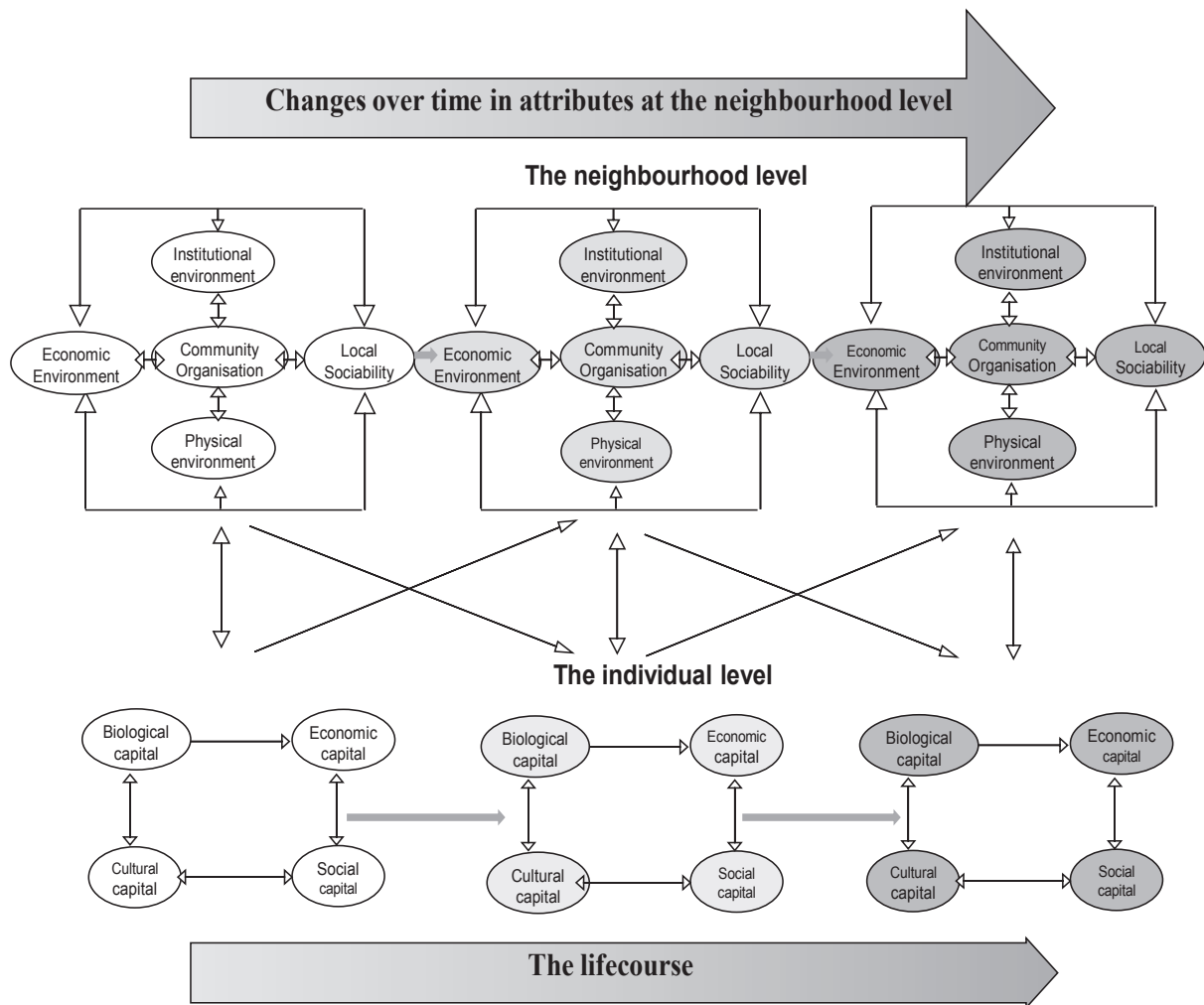


Figure 2 *The ISIS framework: explaining how inequities in health practices are produced in neighbourhoods*

we explored how these capitals interact to lead to differential abilities to act. We then discussed the role that Amartya Sen’s CA could have in helping us focus on the inequity involved in the freedom afforded people to engage in health-enhancing health practices. The focus of CA is the gamut of choices and freedom to choose and the importance of this when considering issues of distributive justice and inequity.

We then turned to a discussion of environmental justice and the specific case of inequities in health practices across urban neighbourhoods. Epidemiological approaches to social inequalities in health across neighbourhoods, we argue, tend to neglect individual agency and focus on the outcome side of inequities. Neighbourhoods tend to be conceived of as geo-spatial structures relevant to health inequality primarily because of the particular distribution of risks, including risk behaviour, found among people living there. This more epidemiological approach to this area of enquiry pays less attention to inequalities in the distribution of resources for health and health behaviour.

In contrast, if neighbourhoods are understood as social contexts in which the resources for health-enhancing behaviour are inequitably provided and therefore inequitably available to be chosen, we reintroduce individuals as social agents back into the discussion of health inequity. In such a perspective, structural conditions for health relevant agency become the focus of understanding the links between neighbourhood and people’s health-relevant action. This we explored using

Bourdieu's capital and Sen's CA theories. We discussed how neighbourhoods differ with regard to their physical and social structures (what we call domains) and how these structures interact with people's capital stock, thereby yielding differential freedoms to choose health-promoting health practices. Thus inequity exists at three levels; in differential levels of capitals (economic, social and cultural), differential levels of neighbourhood resources (available or not through the domains) and through the differential capabilities that result from the interaction of these two.

These arguments are, of course, as relevant in neighbourhood research as they would be in any other environment. Most importantly, we bring to the fore the importance of understanding the socially structured and inequitable shaping of choice. People do not have equal choices to act, and this lies at the basis of inequity in society. A firmer understanding of this, at both the individual and societal level, should help us make a much needed move from discussions about the inequality in health behaviour to inequities in health practices.

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