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## Abstract

Health interventions commonly have adverse effects. Addressing these could significantly improve health outcomes. This paper addresses an adverse effect common in the promotion of health behaviours: exacerbation of health inequalities between low- and high-socioeconomic groups. Health behaviours – particularly, physical activity - are positioned within the context of social inequality and the inequitable spatial distribution of resources. Area-based health policy that targets deprived areas is assessed for its capacity to promote health behaviours without exacerbating inequality. Data are derived from a 16-month ethnography in a deprived English neighbourhood that was the target of area-based intervention that prioritised the promotion of physical activity. Findings provide evidence of adverse intervention effects that further disadvantaged the low-socioeconomic population. Analysis demonstrates how this was ultimately the outcome of localised policy drifting away from initial commitments to equitable service access. These findings increase understanding of the processes through which adverse intervention effects arise and how they can be mitigated.

## Keywords

Health Inequalities; Health Equity; Physical Activity; Lifestyle Drift; Inequality Paradox

## Introduction

The new public health approach is distinct from previous incarnations of public health for emphasising individual risk-management through 'lifestyle' (Kottow, 2012; Petersen and Lupton, 1996). This approach has been appropriated as a form of neoliberal governance throughout advanced liberal

societies, of which England provides a typical example. Health behaviours (e.g., regular physical activity (PA), consuming a well-balanced diet) have thus come to the fore of health policies and promotion. This has been facilitated by the widely accepted notion that - both nationally and globally – we are in the midst of a costly obesity epidemic for which the cause and cure is considered to be lifestyle modification. While it has been convincingly demonstrated that certain so-called lifestyle behaviours significantly influence health (e.g., Loef and Walach, 2012; Scarborough et al, 2011), in the context of growing health inequalities this emphasis on lifestyle tends to undermine the significance of the structural factors, social processes and local settings that both impinge upon people's health and their capacity to adopt 'healthy lifestyles' (e.g., Dorling, 2013; Marmot, 2010).

Research that addresses these 'external' behavioural influences can offer a critical contribution to the health inequalities debates by challenging the 'rhetoric of choice' and rather fostering greater appreciation for the significant influence of social structures (Williams, 2013). Herrick (2011) sheds light on how health and illness are interpreted and governed within advanced liberal societies. She conceptualises common sense understandings of how people should behave in these societies as inescapable 'codes of sensibleness' (Herrick, 2011: 5). Because neoliberal governance is seen to offer individuals greater freedom to choose how to live, codes of sensibleness are promoted in order to remind people of their duty to themselves and others to act responsibly. People are presented as being free to choose, but each expression of 'choice' is liable to moralisation. This moralisation is facilitated by an emphasis on the economic burden that illness places on the State and the labour market. Herrick (2011: 4) argues that:

*...personal responsibility and informed choice may be discursive bedrocks of neoliberal health policy, but the relative influence of people's circumstances or 'luck' has received far too little attention. Given that to be sensible, people need to be able to overcome the effects of their (bad) luck, how responsibility is ascribed is both a thoroughly moral as well as practical question.*

By emphasising the consequences of individual behaviours, many contemporary health promotion discourses successfully obscure the interpretation of national health inequalities as largely determined by the vastly different social conditions in which people live. This has the potential to imply culpability and thus to suggest that the poor health experienced by those living in deprived areas is due to residents acting irresponsibly while the better off enjoy longer, healthier lives as a consequence of their sensible decision-making. Herrick (2011: 4) goes on to argue that:

*...the realm of being sensible remains an under-theorised and empirically sparse field that offers great potential to shed light on the seeming inability (or unwillingness) of government to address a range of societal and political economic concerns that interlock with health.*

Consequently, if we are at all concerned about health inequalities and the potential for neoliberal policies to exacerbate and perpetuate them, we must engage critically with the promotion of health as an individual moral responsibility. The promotion of PA is an exemplar of how notions of beneficial and risky health behaviours have become incorporated into contemporary politics through advanced liberal governance. It fits into what Foucault (1978: 140) theorised as biopolitics, or more specifically ‘bio-power’, which can be viewed as the discursive mechanism through which everyday notions of (un)healthy conduct become inscribed onto and into bodies. The promotion of PA guidelines and advice is a biopolitical technique through which citizens are urged to monitor and manage their own bodies. It is a key component of the new public health promotion of individual risk-management. Therefore, it is vital to understand the social and environmental inequalities that influence people’s PA.

### **Physical Activity, Inequality and Spatial Inequities**

Before the 1990s, relatively few studies within health-related fields paid specific attention to the relationship between physical environments, PA and obesity within populations (Harris et al, 2013; Sallis, 2009). At the turn of the century such studies ‘skyrocketed’ (Ding and Gebel, 2012: 100) but

Harris et al (2013: 536) still described the field as being in a 'discovery phase' that needed to be more influential in future health policy design and intervention delivery.

The relationship between health and place has received significant academic attention and conceptualisation (e.g., Macintyre et al., 2002; Ross, 2000). While both contextual (place) and compositional (aggregate population) explanations offer some insight, it is well established that where people live impacts upon their health over and above individual influences. Therefore, researching health inequalities requires a multilevel approach (Bernard et al, 2007; Subramanian et al, 2003). Contextual factors must be understood as variously constraining and liberating and we need to look at how these impact differentially on individuals' capacity to lead 'healthy lifestyles'. This is a particularly pressing concern as Shoveller et al's (2016: 487) recent review of population health intervention research found that context was predominantly treated as a 'black box' or merely something that needed to be 'controlled for'.

Regardless of how socioeconomic status (SES) is measured - e.g., income, education - research consistently concludes that individuals with low-SES tend to perform less recreational PA than those with higher-SES and generally do an insufficient amount to be beneficial to health (Beenackers et al, 2012; Elhakeem et al, 2016; Gidlow et al, 2006). Neighbourhoods with undesirable physical and social features and a lack of social amenities have been shown to exacerbate the vulnerability of, and contribute to the poor health experienced by, many low-SES individuals (Green, 2015; Scambler, 2012). This is one reason why conceptualising health as an individual moral responsibility is liable to accusations of victim blaming (Adler and Stewart, 2009) and why low-SES individuals are often described as facing a double burden: being geographically/socially disadvantaged and individually marginalised (e.g., Masuda et al, 2010).

The combination of the population characteristics of an area, facilities and organised activities constitute what Ellaway and Macintyre (2010: 400) termed 'opportunity structures'. These were described as 'socially constructed and socially patterned features of the physical and social

environment which may promote or damage health either directly or indirectly through the possibilities they provide for people to live healthy lives'. The presence of local PA opportunities is a fundamental component of these structures. Ståhl et al (2001: 3) described 'incentive environments' as being places providing the best access to PA facilities and conversely 'restricting environments' that constrain access and/or provide attractive sedentary settings. Restricting environments are more widely known in the literature as 'obesogenic environments'; a term attributed to Egger and Swinburn (1997: 478). This is because in area-based research, PA opportunities are commonly considered alongside the availability of food, namely fresh fruit and vegetables and the prevalence of fast food outlets (Kamphuis et al, 2007; Nelson and Woods, 2009; Townshend and Lake, 2009).

McCormack and Shiell's (2011) systematic review found a positive relationship between supportive built environments and PA among adults and that this association was likely to exist independent of residential location choices. Halonen et al's (2015) longitudinal study in Finland provided evidence of a decrease in PA as the availability (by distance and count) of local sports facilities decreased. Additionally, Sallis et al's (2009: 487) international study found that a clustering of 'activity-friendly attributes' in neighbourhoods was necessary to increase substantially the number of people meeting recommended PA levels.

These findings indicate a significant public health issue that is particularly evident in England. Previous research in England demonstrated that deprived neighbourhoods had fewer PA facilities – both public and private - than more affluent areas (Hillsdon et al, 2007) and that people living within shorter distances of affordable facilities were more likely to report having met government PA recommendations (Panter and Jones, 2008). Farrell et al (2014) analysed data from over one million adults in England and found statistically significant income and education gradients in physical inactivity and that inactivity was significantly higher in more deprived areas. These findings demonstrate that PA provision follows Tudor Hart's (1971) 'inverse care law' and is therefore a factor in the perpetuation of health inequalities. Clearly the inequitable spatial distribution of PA facilities in

England (and elsewhere) inhibits PA and health and low-SES individuals are disproportionately disadvantaged.

However, health policy-makers should consider it promising that research has *also* shown that low-SES individuals - if suitably supported personally and/or with modifications to their lived environment - respond positively to intervention. For example, effective strategies have included providing underserved communities with local facilities, improving the local social environment and providing free to use services (Choitz et al, 2010; Jongeneel-Grimen et al, 2014; Lowther et al, 2002; Rabiee et al, 2015; Yancey et al, 2006).

These findings are echoed in Cleland et al's (2012) systematic international review of PA initiatives in socioeconomically disadvantaged communities. Generally the reviewed interventions had a small or no effect on PA, but the more effective interventions used more tangible components to remove barriers, e.g., free gym memberships, child-care. Similarly, Everson-Hock et al's (2013) review of community-based dietary and PA interventions in the UK concluded that interventions need specifically to target low-SES groups. In part, this recommendation was based on the finding that interventions typically attracted people from higher-SES groups. This leaves untargeted interventions liable to reproduce the 'inequality paradox' (Frohlich and Potvin, 2008), a phenomenon whereby health interventions exacerbate health inequalities by increasing the relative health gap between low- and high-SES populations. As increasing inequality is liable to have a detrimental health effect at the national population level, taking precautions to prevent this particular adverse effect should be prioritised (Wilkinson and Pickett, 2010). However, despite the 'unanticipated consequences of purposive social action' having long been an academic concern (Merton, 1936: 894), this is one of many adverse effects resulting from public health interventions which, as Lorenc and Oliver (2014) outline and argue, now rarely receive adequate attention in either research literature or policy evaluation.

As these research findings establish, an inherent relationship exists between environmental factors and social practices, e.g., being physically active. These findings support arguments against the individualised responsibility for lifestyle modification that characterises the new public health. Shifting towards a more equitable distribution of facilities and services alongside targeted interventions would better support residents in low-SES areas and efforts to reduce national health inequalities. However, if such area-based interventions are to reduce health inequalities, their design needs to be informed by what Bonell et al (2015: 3) termed ‘dark logic models’. These pre-emptive models influence intervention design by identifying potential adverse effects (e.g., reproducing the inequality paradox) and developing strategies to protect against their reproduction.

Supporting this aim, the following findings are presented from an ethnography of a severely deprived area in England – referred to as ‘Kingsland’ (pseudonym) - where area-based health policy had significantly increased the activity-friendly attributes of the local area and provided targeted support. Despite the targeted nature of this intervention the findings provide evidence of adverse intervention effects which were liable to further disadvantage the low-SES population both relatively and directly. The policy design and intervention implementation were scrutinised in order to assess how and why these adverse effects had occurred despite an area-based approach being taken. Mixed methods were utilised in order to analyse the relationship between quantitatively measured outcomes (e.g., PA participation) and the more nuanced – but less researched - qualitative aspects of policy implementation: people entrenched in social systems interpreting, and making decisions about the priority of achieving, policy aims. Discussion of the complex relationships between health, place, inequality and intervention occurs throughout with conclusions made regarding the challenges facing policy makers in advanced liberal societies.

## **Methods**

The empirical data are from a 16-month ethnography. The research site was North Kingsland, a low-SES neighbourhood in England and focus of an area-based intervention that was implemented

between 2000-10 and significantly improved local PA provision. Therefore, North Kingsland provided a relatively novel research site: a severely deprived neighbourhood with numerous PA facilities and services.

Prior to data-collection, ethical approval was obtained from the University of Leicester's Research Ethics Committee. Data-collection commenced in 2012 approximately two years after the end of the ten-year intervention. The immersive and malleable characteristics of ethnography allow critical attention to be applied throughout the micro-macro scale and thus make it the best method to engage with the relative nature of choice, an issue that has come to characterise academic debates about health behaviours such as PA (Cockerham, 2005; Veenstra and Burnett, 2014; Williams, 2003). Therefore, ethnography provided a means to understand how the intersections of contextual and compositional factors influenced the physical (in)activity of North Kingsland residents.

The epistemological underpinning of this research is that multiple realities are constructed by the researcher and respondents, both independently and in cooperation. Through the analysis of empirical data, the researcher presents an account of the observed phenomena. This is neither fixed nor incontestable, but to be successfully defended, it must be grounded in rigorous and honest academic endeavour. Data-collection took place between March 2012 and June 2013 and primarily involved (participant-)observation recorded in extensive fieldnotes. These notes totalled in excess of 400,000 words and documented 230 fieldwork excursions (850.75 hours). The findings also draw upon a series of semi-structured interviews conducted with 14 local PA service providers and a questionnaire survey of leisure centre users (n=519). All fieldnotes and interviews were thematically coded with data-collection being refined and analysed in line with an approach typical of grounded theory (Charmaz and Mitchell, 2001). Analysis was aided by NVivo 10 and SPSS 22 software.

The interviews and survey were conducted towards the end of the data-collection phase. Questions were designed to address themes that had been identified and coded throughout analysis. Interview participants were purposively selected by the researcher for their relevance to exploring the identified



themes. The survey was a purposive sample of Leisure Centre users and facilitated a comparison with official service figures; this helped to gauge current local usage. In order to gain a sample representing as far as possible the full range of users, collection took place on seven occasions at various times throughout the day/week. The sample was comprised of those who voluntarily completed the survey.

As is to be expected with a project of this scale, many themes were identified throughout the data-coding process. Two of these themes are explored here in detail: *inequity drift* and *triple disadvantage*. These themes were derived by coding numerous examples of related data. However, as is typical of ethnography, in this article specific examples are highlighted in order to illustrate the essence of each theme. Before presenting the findings, it is necessary to present a picture of the field constructed from observations and local documents obtained during fieldwork. To maintain confidentiality pseudonyms are used throughout and applied to local documents.

## **The Field**

Kingsland was awarded a £49.5 million New Deal for Communities (NDC) grant to spend within a ten-year period (2000-10). It was one of 39 NDCs targeting some of the most deprived areas in England. NDC regeneration was designed to bring about holistic change by improving five key areas: poor job prospects; problems with housing and the environment; high levels of crime; educational underachievement; and poor health. Additionally in 2001, along with 11 other deprived areas of England, Kingsland was designated as a Sport Action Zone (SAZ) which was intended to contribute to local regeneration between 2002-2007. The SAZ aim was to create more equitable participation in sport and PA. These area-based interventions (ABIs) were established, funded and implemented by Tony Blair's New Labour government (elected in 1997) after the Acheson Report (Department of Health, 1998) (an independent enquiry into health inequalities in England) as part of an overarching aim to reduce national inequalities by implementing ABIs in deprived areas.

219 Kingsland was an area severely affected by social deprivation with a population of approximately  
220 15,000 residents. Around the time of this area-based policy focus, the Index of Multiple Deprivation  
221 (2000) ranked Kingsland within the top 1% of the most deprived areas in England. Additionally,  
222 England is separated into 324 areas governed by local authorities and in 2013 Kingsland was part of  
223 the 25<sup>th</sup> most deprived local authority area. In short, Kingsland was a deprived subsection of a larger  
224 region characterised by relative deprivation.

225 There were nearly 5,000 residential properties in Kingsland built around a park with a three kilometre  
226 perimeter. Almost three quarters of these properties were owned by the Local Authority and (as part  
227 of the welfare system) rented as social housing. This research focused on the neighbourhood where  
228 the housing estate most severely affected by social deprivation was located. This was the main site of  
229 NDC and SAZ investment. This neighbourhood was known as North Kingsland and had a long history  
230 of social deprivation, initially being built in the 1930s as part of a slum clearance project.

231 The Kingsland Community Association was formed to deliver the NDC programme with a  
232 democratically elected board mainly comprised of local residents. The Association also hosted the SAZ,  
233 which led to the NDC and SAZ initiatives becoming closely aligned. Consequently, and characteristic  
234 of the 'lifestyle drift' policy trend (Popay et al, 2010), facilitating 'healthy living' played a prominent  
235 role within the NDC regeneration.

236 A SAZ requirement was for a needs assessment and action plan (NAAP) to be conducted and led by  
237 community consultation. The consultation work firmly established that many North Kingsland  
238 residents did engage in PA and others wanted to but stated that significant barriers inhibited their  
239 participation, particularly the absence of a local swimming pool. As a result, improving existing PA  
240 facilities and building new ones was prioritised.

241 Accordingly, the consultation team found that many local residents expressed an interest in the  
242 proposal to build the city's new flagship swimming pool and leisure centre in North Kingsland. This

proposal did not emanate from the NDC-SAZ interventions but was rather a local government project subsequently incorporated into the regeneration plan. Kingsland Leisure Centre opened in 2004. It cost approximately £10 million to build with approximately £1 million sourced from NDC funds.

The positioning of the Centre on the border of where North Kingsland meets a more affluent area and a school closure to facilitate its construction, together with many years of local neglect, meant that there was a lack of trust in North Kingsland in local authorities and their policies. The consultation identified that a view had developed locally that this leisure centre was not being built for North Kingsland residents, but rather for more affluent 'outsiders'. Responding to this scepticism – and seemingly acknowledging the potential for this facility to reproduce the inequality paradox – the consultation team stated in the NAAP (2002: 42) that:

*The Leisure Centre in Kingsland must be run differently and must cater for its local catchment area otherwise it will be seen as another failure by the Local Authority to provide for its most deprived community.*

In this context, being 'run differently' meant not following the market-based approach but rather providing services that responded to structural limitations and place-effects. This was evident when it was later stated in the NAAP (2002: 78) that:

*The key to regeneration is about seeing an individual as a whole person and not just the part which we are interested in i.e. the ability and motivation to play sport. The majority of them have been failed by a wide range of service providers over a number of years and this has built up levels of deprivation and social exclusion to current levels on the estate.*

Accordingly, on opening, the leisure centre offered subsidised admission fees to all North Kingsland residents, had a subsidised on-site crèche (drop-in childcare), and the SAZ team ran cheap or cost free activities, e.g., one-to-one mentoring and weight-loss groups, that targeted local residents. Therefore, given the novelty of this physical transformation and holistic approach to PA promotion the outcomes

of these ABIs, positive or otherwise, could usefully inform the design of future area-based health policy that seeks to address the inequitable distribution of PA facilities and opportunities in order to reduce inactivity.

## **Findings and Discussion**

Despite the promising transformation of the local environment, the following analysis shows that: i) through a process of '*inequity drift*' this initiative created conditions which were liable to reproducing the inequality paradox and ii) this initially positive health intervention had adverse effects over time that are conceptualised as '*triple disadvantage*' because of the way they further disadvantaged North Kingsland residents.

### *Inequity Drift*

During data-collection and triangulation it became increasingly evident that the leisure centre was not well used by the targeted North Kingsland residents. Realising fears identified in the initial consultation, during observations between 2012-13 it was apparent that the local perception was largely that the Centre was 'for them' – outside users - albeit with some concessions. However, there was a consistent narrative among local residents and Centre staff of how 'things used to be better'. This was in reference to how, initially, the Centre catered well for local needs by offering interventions designed to make access more equitable and, as a consequence, drew in greater numbers of North Kingsland residents.

A 2008 independent evaluation of the SAZ found that the Centre had initially removed a number of barriers and increased local PA, but local usage was in decline. The Centre opened in 2004 and the evaluation compared use figures from 2005-06 and 2006-07. Initially, 69% of *all* Centre users were from North Kingsland but just a year later this had dropped to 43%. Due to incomplete records and staff redundancies, obtaining similar use figures to assess the situation during this research proved challenging. Despite this, admission figures were obtained for the targeted North Kingsland residents

from the first year the Leisure Centre was open (2004-05) to the most recent full year (2012-13) and a few years in between. Table 1 shows the number of *times* residents used the Centre (i.e., 1 represents one visit not 1 person).

**Table 1.0: Visits to Kingsland Leisure Centre by Targeted North Kingsland Residents**

Year	Total Visits
2004-2005	14,648
2008-2009	10,629
2009-2010	11,822
2010-2011	10,804
2012-2013	9,500

The figures show a 35.14% reduction in local usage over an eight-year period. These findings are supported by the basic questionnaire survey conducted during this research in 2013. Only 11.6% of those surveyed came from the originally targeted area and were thus eligible for subsidised entry-fees.

While these data do not demonstrate whether initial users have continued to be physically active away from the Centre or why in particular the rates of local usage had dropped so significantly, they do broadly indicate that over time local residents used the Centre far less frequently than they had previously. They also show that while the vast majority of users previously came from North Kingsland as the years advanced this changed and the majority of users came from the more affluent surrounding areas. Given the role that the leisure centre had played in facilitating local activity (particularly by providing local access to a swimming pool) it is reasonable to deduce from these findings and those of the independent evaluation, that Kingsland Leisure Centre is now susceptible to reproducing the inequality paradox and related 'equity harms' (Lorenc and Oliver, 2014: 289).

309 However, why, when initial documents clearly highlighted that policy implementers were aware of,  
310 and intent on resolving, the potential for this to happen - and thus targeted this low-SES population -  
311 did such a situation ultimately arise? Was it inevitable, despite the efforts made by those  
312 implementing policy, due to the compositional characteristics of the targeted group, i.e., low-SES? To  
313 address this question it is necessary to return to the initially identified barriers to access and the  
314 interventions designed to address them.

315 For this, it is useful to call upon the insight of Tom who had grown up on the northern estate and, after  
316 benefitting from a local recruitment strategy, had worked at the Centre since it opened. He explained  
317 why he felt fewer local residents now used the Centre:

318 *I've been here since day one, do all the memberships, and the majority of the people coming in*  
319 *aren't from Kingsland...It's dwindled down every year and that's probably because of barriers*  
320 *like cost and the crèche being taken away. The bus that used to come in here don't come in here*  
321 *no more. So you know I've just gave you three barriers why the local Kingsland people are not*  
322 *using the facility and the whole point was for them to use the facility.*

323 *So you've just took three things away and not gave them nothing back so now, let's say, the*  
324 *people that come here, probably 15% of them, are from Kingsland...The people that live outside*  
325 *of Kingsland, who have probably got a bit more money, well they're seeing it as a bonus because*  
326 *it's cheaper for them. They're going to take advantage of us now. (Tom, Gym Instructor)*

327 Here Tom provides a lay-description of the inequality paradox and his local knowledge supports the  
328 data on Centre usage. Yet, significantly, he also echoes the 'things used to be better' narrative, giving  
329 specific examples - the absence of which were apparent during fieldwork. Previously the Centre could  
330 claim to be 'run differently' because it targeted a low-SES population and addressed barriers inhibiting  
331 their PA. However, due to a process I term '*inequity drift*', interventions that had previously made

332 access to the Centre more equitable had now declined or ceased to exist entirely, e.g., concessionary  
333 rates; cheap/free targeted activities; subsidised childcare.

334 Although concessions generally were honoured, the most significant price increases were for local  
335 residents who claimed state welfare benefits. Logically, they had previously received the most  
336 substantial subsidies. In some cases, these residents were now expected to pay more than double  
337 what they used to. Therefore, the most vulnerable sub-group were the most disadvantaged by this  
338 inequity drift. The drop in attendance figures in Kingsland supports Taylor et al's (2011: 138)  
339 contention that concessionary rates in deprived areas are 'inelastic' and thus price increases are likely  
340 to detrimentally impact local PA.

341 Nevertheless, observations made it clear that the significance of these price increases must be  
342 considered alongside the decline in inexpensive/free local activities initially provided as part of the  
343 SAZ. Kingsland Leisure Centre initially hosted numerous SAZ initiatives that attempted to address the  
344 multiple, not merely financial, barriers that had been identified, e.g., one-to-one mentoring, weight-  
345 loss groups, and youth activities. A local resident and youth worker, Cary, who was part of a (no longer  
346 funded) NDC initiative for young people that, during fieldwork was run by volunteers, was one of many  
347 who expressed frustration at how the Centre was now run. Cary said:

348 *The Leisure Centre doesn't run any different from any other place like that in the city; it's just*  
349 *trying to make money. They're not worried about getting people from here [North Kingsland] to*  
350 *use it...I've tried to book things for us [Youth Centre] actually but their prices are out of our price*  
351 *range...It's definitely not as cheap as it used to be. That's because you had the NDC putting in*  
352 *like, say, a million pounds and for that money they said 'We'll give you it cheap for a certain*  
353 *amount of time' but after that it doesn't go on, so things like that just stop. (Fieldnotes:*  
354 *8/10/2012)*

355 Cary's comments can be read as an indictment of the Centre: another failure by the Local Authority to  
356 provide adequately for one of its most deprived communities. This is despite the original consultation  
357 document warning that in order to avoid such an outcome the Centre needed to be 'run differently'.  
358 Meeting local needs was never solely about financial accessibility. It was recognised that  
359 supplementary services were required to engage residents and assist them to overcome the multiple  
360 barriers faced by low-SES populations living in deprived areas. Being 'run differently' can be read at  
361 least in part as ensuring that the targeting of North Kingsland residents and partnership working with  
362 local initiatives was sustained, despite financial pressures to increase revenue. Largely this did not  
363 happen.

364 Similarly, the onsite childcare facility originally accommodated a daytime nursery and a subsidised  
365 sessional crèche. Eight years on and the sessional crèche facility was no longer available. To reduce  
366 expenditure the Local Authority closed the childcare facilities at all of its sport and leisure sites  
367 between 2010-11. The childcare facilities at Kingsland Leisure Centre were subsequently rented to a  
368 private-firm who used the space to run a nursery. These on-site childcare facilities became merely  
369 incidental, as they no longer provided the sort of subsidised sessional service that could facilitate use  
370 of the Centre by local (particularly single) parents.

371 Through a process of *inequity drift* access to the Leisure Centre became less equitable over time.  
372 Initially, the ABIs transformed the physical environment and provided targeted support that addressed  
373 multiple structural barriers that inhibited residents' PA. However, the downgrading and removal of  
374 services that accompanied these improvements to the local environment made access to the Leisure  
375 Centre less equitable and thus, like other untargeted interventions, it became increasingly liable to  
376 reproducing the inequality paradox. The relatively high initial participation rates of North Kingsland  
377 residents, combined with the gradual decline in services to support their PA, suggests that potentially  
378 reproducing the inequality paradox was not an inevitable outcome due to the compositional  
379 characteristics of the target group. Rather it can be interpreted as resulting from the *inequity drift* that



accompanied a gradual - but ultimately total – reduction in intervention funds. As time passed, and the ABIs ended, the inequity drift process created a situation whereby service providers inappropriately returned to the rhetoric of choice - dominant in new public health discourse - by approaching PA as an individual responsibility. This was most apparent in the adverse intervention effect that left residents facing *triple disadvantage*.

### *Triple Disadvantage*

As the PA of local residents fell down the policy agenda barriers that previous interventions had attempted to address were subsequently resurrected. Perhaps as a means of defence, those who managed the Leisure Centre spoke about previous interventions as if they were *still being offered*. This involved emphasising personal choice as a way of explaining local residents' (non-)participation. The following comments come from John, Head of Sport and Leisure Services at the City Council. Referring to what had been done to ensure that the Centre remained accessible to local residents he said:

*When people ask you what are the barriers to participating in sport they will tell you cost, transport, childcare, time. Not much I can do about time, but we put in the nursery for the childcare. We had a bus stop right outside the Leisure Centre. Part of the deal with the [NDC] was that North Kingsland residents would get a discount on entry fees...We got rid of potentially three barriers. I think when you get rid of those barriers you come up with people's real barriers: the water's too cold, I don't like the changing rooms, I feel embarrassed about my body, I don't want to go around with wet hair for the rest of the day. You know the real reasons why sometimes people don't do it and so we've tried very much to get rid of as many barriers as we could...It's there for people if they want it. Hopefully, they can afford it and if they can't there is free stuff going on, which they can afford. I still go back to that thing about time; people just don't seem to be able to find the time.*

403 John articulates a level of commitment to accessibility which, although perhaps evident previously,  
404 was no longer the case at the time he was interviewed. He implies that everything had been done to  
405 ensure that North Kingsland residents could access the Centre and it was subsequently factors out of  
406 Local Authority control that were the issue. The 'choice' John proposes that residents were making is  
407 in turning down the opportunity to attend a facility that had 'removed' the barriers to participation  
408 identified in initial consultation work. In this sense, his words most powerfully demonstrate the  
409 process of inequity drift and what I conceptualise as the '*triple disadvantage*' these interventions carry  
410 into the present.

411 Referring to past interventions in this way facilitates the application of a rhetoric of choice to a low-  
412 SES population. Therefore, on top of being doubly disadvantaged (geographically/socially  
413 disadvantaged and individually marginalised) residents were now further disadvantaged by the very  
414 interventions that had purportedly been designed to support them. The ABIs had comprehensively  
415 failed to offer the sustained support necessary for a service like the leisure centre to offer equitable  
416 provision. Instead, examples of previous targeted support came to be used to frame non-participation  
417 by residents as a form of compositional recalcitrance. Thus North Kingsland residents became triply  
418 disadvantaged.

419 This adverse effect was never more evident than in discussion with Karen, the Leisure Centre Manager.  
420 The following comments were typical of her interpretation of the situation:

421 *I think it's their own choice now, that's the barrier. And that might sound really controversial*  
422 *but I believe it's a lifestyle choice now. Every barrier that we've thought about has been*  
423 *addressed. You know, the cost, the transport, the childcare, the mentoring. We're part of [this*  
424 *initiative], we're [that initiative]: we're everything. I believe now it's about choice because I don't*  
425 *believe this estate is as poor as it was...I don't believe that it's unattainable to get here now, no*  
426 *matter [where] you're from...I believe that you can have access to this should you choose to.*

Again, Karen uses examples of interventions that were downgraded or stopped entirely some time ago to 'demonstrate' that the Centre was accessible to all. This enabled her to frame the issue of local (non-)participation within the widespread discourse of individual responsibility. Essentially, here local residents were accused of not taking advantage of opportunities that were not actually there. This adverse effect also informed the perceptions that people living in and around North Kingsland had of each other. The childcare services provide a good example.

The nursery had a glass wall that looked out into the Centre's main communal area. Despite no longer fostering accessibility to the Centre, during the daytime most Centre users would see a busy scene of infants at play behind the glass. This daily experience prompted some local people to rehearse the 'things used to be better' narrative. However, it also 'confirmed' for others that the Centre still had a drop-in crèche. The following fieldnote from an evening weight-loss session describes a typical encounter:

*Sunita said: "That's the thing with the classes, I can't do mornings. A lot of the classes are during the day and I can only come in the evening because my husband looks after our baby...I used to go to lots of classes before, but then you have a baby and your life changes and you have to change too. But I miss going to things like Zumba and Body Combat." One of the women in the class responded: "Well just put your child in the crèche, they have a crèche here". Sunita replied, "No they don't, it's a nursery. It would be great if it was a crèche, but it's not". (Fieldnotes: 2/7/2012)*

Despite this service no longer being available, the memory of past efforts to remove barriers stayed with those who did not rely on the services themselves. This can and did lead to the recasting of those who continue to face barriers as people who were abjectly failing to 'help themselves'. Previously, the crèche service facilitated people like Sunita to exercise personal responsibility for their health and to adhere to well-established codes of sensibleness by reducing a common barrier to physical activity. However, interventions that had once implicitly recognised and explicitly addressed the limits of

applying standards of moral individualism to residents living in this deprived area, came to be used to apply the very same discourse to this population thus triply disadvantaging them.

## **Conclusion**

Because they rely on participation in order to produce positive outcomes, health interventions designed to promote health behaviours need to take account of existing inequalities and the influence of contextual factors or they are liable to exacerbate health inequalities. Consequently, ABIs that target deprived areas and address the multiple levels of disadvantage that local populations face are potentially an effective mechanism through which to support behaviour change in low-SES populations and thus to reduce national health inequalities. Partially transforming the physical environment of a deprived area in order to facilitate local PA is but one essential component of addressing the inequitable distribution of health promoting opportunities and services. As the findings presented from North Kingsland illustrate, if targeted support cannot be sustained in the long-term and thus local provision becomes inequitable over time, these interventions are liable to produce adverse effects. Therefore, while the success of such interventions is to some extent reliant upon personal responsibility being exercised and individuals adhering to well-established codes of sensibleness, what these examples make apparent is that intervention design and delivery need to be better informed by an appreciation for how existing inequities inhibit people's capacity to adopt and maintain health behaviours.

In this case, the dominance of neoliberal framings of health led ABIs designed to reduce national inequalities by addressing structural and social disparities and local deprivation to drift into promoting individual lifestyle modification and ultimately to contribute to disadvantage experienced by local residents. On the evidence of these findings, unless ABI design acknowledges and mitigates for the potential of this political influence to compromise efforts to promote behaviour change in deprived areas then such intervention is susceptible to producing only short-term positive outcomes for low-SES populations. Without such protection there is also a sense of inevitability about such interventions

reproducing adverse effects that exacerbate inequality and disadvantage both relatively and directly.  
This research increases awareness and understanding of the adverse effects generated by ABI and  
highlights the challenges ahead for policy makers. This knowledge can and should contribute to the  
development of pre-emptive models and policy processes that reiterate how fundamental sustained  
equitable provision is after area-based health policies have been implemented in deprived areas.

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