URBAN DESIGN AND SOCIAL CAPITAL: LESSONS FROM A CASE STUDY IN BRAUNSTONE, LEICESTER

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ABSTRACT

A valuable asset in sustainable regeneration is the 'community' with their developed networks, bonds and ties or in other words its social capital which is a useful resource. Braunstone in Leicester is typical of many disadvantaged areas in the UK, with persistent socio-economic problems exacerbated by a poor physical setting. With a large regeneration programme funded by the New Deal for Communities coming to a close, we conducted a case study to explore the impact of improved local facilities and the effect of walkability on social capital. The lessons learnt suggests that responding to needs at a finer grain is vital in developing neighbourhoods for social capital such as responding to the needs of different user groups, responding to local patterns of use and needs of micro localities, and improving the perceptions of neighbourhoods. Local facilities and neighbourhood walkablity provides incentives for longer term residency, and facilitates interaction which helps social capital to grow. Accessing services by walking and using public transport proves vital to engage in social activities, while a poor physical environment, lack of accessible services and public transport negatively affects participation in social and leisure activities. Facilities and buildings provide a mediating role in developing social capital in a community, providing opportunity for social interaction which encourages people to reside in an area for longer. Improving connections beyond the neighbourhood is important to help retain people for longer term residency to develop social capital.

Keywords: social capital, urban design, walkability, facilities, regeneration

1. INTRODUCTION

Social capital of a community is a valuable asset in regeneration projects. Human capital is the attributes of individuals defined by one's skills, qualifications and knowledge, while social capital refers to an asset generated by being part of a 'community'. The World Bank defines social capital as "the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions…Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together(http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXT TSOCIALCAPITAL)". It is therefore an intangible asset that develops over time with the goodwill, bonds or trust that result from shared values, outlook on life, attitudes or behaviours that can become a resource to serve common goals. As the concept deals with aspects of social structure that enable social action, it can be a resource in sustainable urban regeneration to achieve common goals such as higher educational attainment, better health, lower levels of crime, more effective forms of government and growth in GDP (Harper 2001, Aldridge et al. 2002).

The physical design of neighbourhoods can impact on social capital of communities. The contribution of the environment appears as a variable in research on social capital and public health (Macintyre and Ellaway 1998, Kawachi et al. 1999a, Baum and Palmer 2002) and also in social capital and crime (Kawachi et al. 1999b, Lindstrom et al. 2003). The manifested nature of social capital in a neighbourhood is context specific and is determined by history and culture, social structures, economic inequalities and individual consumption patterns (Cladrige 2009). Being a theoretical construct reliant on context specific factors may have resulted in the lack of operational knowledge, including any in–depth discussion of the role of physical design in relation to social capital. However, with the renewed interest to improve the quality of the environment to promote healthy and active life-styles and social equality in recent regeneration initiatives in the UK, it is timely that this operational knowledge gap between social capital and urban design is addressed to provide an impetus for sustainable regeneration.

The New Deal for Communities (NDC) regeneration programme provided resources to tackle five key themes in the most deprived areas in the UK: poor job prospects, crime, educational under achievement, poor health, and problems with housing and the physical environment. In Braunstone Leicester, a £49.5 million community led regeneration scheme - 'A New Deal for Braunstone (BNDC)' was implemented in 2002 to 2009 to improve the area and to develop the community. There was substantial investment in buildings to provide a library, civic centre, health centre and leisure facilities aiming to improve the

quality of life. BNDC comprises nearly 5000 properties with a population size of 15,000. Around 74 per cent of the residential properties are owned by Leicester City Council.

We conducted a case study to explore the impact of improved facilities and buildings and the effect of walkability on social capital in the area. The SUE–MOT (Sustainable Urban Environment: Metrics, models and Toolkits, EPSRC grant no. GR/S18311/01) project aimed to encourage key decision-makers to systematically assess the sustainability of urban development by facilitating decision-making at every stage of the development process. Our work revealed a significant void in tools to address social sustainability across all scales and at different stages of urban development. The 'social capital' work package identified the urban design attributes that encourage social capital to inform visions for sustainable urban development.

We sought to shed light on two main questions through the case study;

- Has social capital in the Braunstone community been affected by the building of new facilities such as the Brite Centre and Leisure Centre?
- Does the walkability of the neighbourhoods affect the social capital of the area?

As the 'softer' and intangible attributes dealt with cannot be easily quantified, the study specifically looked at forms of proxies that could be made use of in assessment such as 'walkability' and improvement to facilities that helps build social capital. In the background of our previous work that proposed key attributes of a neighbourhood that encourages social capital to evolve, this paper reports the lessons learnt from a case study that further explored this relationship to gather operational knowledge to inform sustainable regeneration (pparanagamage 2010).

2.0 METHODOLOGY

We gathered hard and soft data on key demographic characteristics, walking environment, use of leisure facilities and social capital. A questionnaire survey captured information from one hundred and thirty nine responses from residents living inside and outside the Braunstone New Deal for Communities area. The data gathered were on the use of the facilities and their physical features, perceptions of local residents on these facilities and the walking environment, socio-economic background, frequency of placed visited for social interaction and participation in social activities, trust and sense of belonging within the community. Two workshops were conducted, each with ten local residents across a range of ages to further understand local issues. A site survey of the walking environment supplemented the data collected from the questionnaire survey. Records of activities in a typical day in the Brite Centre and Leisure Centre noted the time and type of activity. Qualitative observations were also recorded regarding the nature of users, what they did at the centres, when and with whom. This was supplemented by 'user data' of the Leisure Centre provided by the Leicester City Council.

Spatial data, such as land-use patterns, street connectivity, bus-stops, public transport routes and location of the key services (used for social interactions) were collected from secondary sources. The relative street connectivity of the neighbourhoods was analysed considering the density of cul-de-sac streets within each neighbourhood. A proximity analysis was conducted using Geographical Information System (GIS) to assess the accessibility to the key services of the neighbourhoods by walking (within 10 minutes walking distance - 400m) and public transport.

3.0 URBAN DESIGN AND SOCIAL CAPITAL

If intangible assets such as goodwill, bond and trust arise from shared commonalities, can the urban design of neighbourhoods support and promote opportunity for such shared commonalities to develop? Acknowledging the 'facilitator role' of the physical environment, Carmona (2003) argued that urban designers influence, inhibit, facilitate, and modify, but do not determine patterns of human activity and social life. Gehl (1961) suggests that the physical framework does not have a direct influence on the

quality, content and intensity of social contacts. The environment can affect possibilities for meeting, seeing and hearing people acting as a background and starting point for many forms of contact to develop.

Our previous work revealed 12 recurrent attributes that help people to live, work and relax and thus encourage formal or informal interaction and longer-term residency in the area in which they live, aiding the growth of social capital. We explored the intersection of social capital theory, urban design guidance and empirical research on social capital that considers the built environment as a variable. The practice guidance for urban design suggested that practitioners design places that encourage social capital, although without specific reference to the label of 'social capital'.

The urban design guidance reviewed were from a range of organisations in the UK that publish such guidance, namely: government organizations such as the Department for Environment, Transport and The Regions (DETR), the Department for Transport (DfT), the Office of the Deputy Prime Minister (ODPM) and the Association of Chief Police Officers (ACPO); affiliated government bodies such as the Commission for Architecture and the Built Environment (CABE) and English Partnerships; and third sector organizations such as the Prince's Foundation for the Built Environment and the Joseph Rowntree Foundation (JRF). The principles of urban design set out in these documents have been extracted from the shared experience of practitioners, on the premise that places can be developed in a way that enables people and communities to achieve their full potential for a higher quality of life.

The key concepts through which urban design can facilitate and allow for social capital to evolve are to design for retaining people in the area for the longer term and to provide for means of repetitive interaction. Four themes and twelve attributes that facilitate these two key concepts were identified, thus allowing social capital to evolve (figure 1). These are:

- Connectivity: movement structure, mixed use, local facilities.
- Safety: ownership, natural surveillance, access and footpaths.
- Character: context, public space, personalization.
- Diversity: life cycle needs, mixed tenure, and life style differences (Paranagamage 2010).
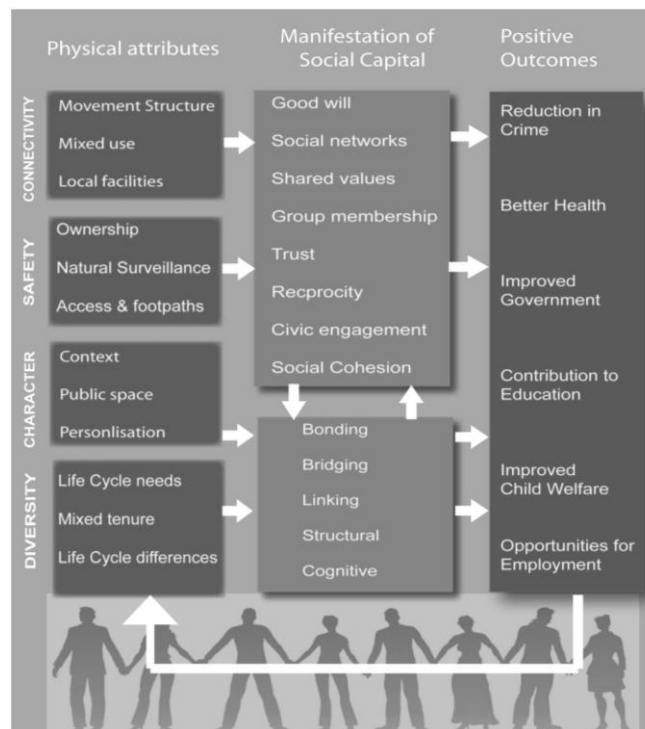

Figure 1: Physical attributes contributing to social capital

4.0 KEY FINDINGS

Our previous work, which was previously described, recognised that the built environment plays a mediating role for social capital to develop. Therefore it was unwise to directly measure a relationship between social capital and attributes of urban design in the Braunstone case study. We measured this by proxies such as the use of local facilities and degree of walkability, which indicated the level of opportunity the built environment, can provide to foster this asset.

Overall, the findings suggest that Braunstone is typical of many disadvantaged areas, with persistent socio-economic problems exacerbated by a poor physical setting. Local facilities and neighbourhood walkablity provides incentives for longer term residency, and facilitates social interaction helping social capital to evolve and grow. Accessing services by walking and public transport proves vital to perform the day-to-day life and social activities; on the contrary, a poor physical environment, lack of accessible services and public transport affect levels of participation in social and leisure activities thereby limiting opportunities for social interactions. This in turn can reinforce health inequalities and social isolation of the most disadvantaged groups from the wider communities (Marmot 2010).

However, findings suggest that responding to needs at a finer grain, rather than that of the larger neighbourhood as a whole, is a vital requirement in developing neighbourhoods for social capital. The findings are not mutually exclusive but relate to each other closely.

4.1 SOCIAL CAPITAL IN BRAUNSTONE

The strong sense of community prevalent in Braunstone indicated high levels of social capital. The importance of socialising was higlighted, comparing well with the results from 2008 MORI survey data (Boeck 2009) with high percentages stating that people in the community were friendly. There were good levels of trust with feelings of being part of the community and a significant number giving unpaid help in the community (Figure 2).

Longer term residency in the area is an important proxy as social capital evolves over time with increasing reminiscence and face-to-face interaction. Many residents were either satisfied or fairly satisfied with their accommodation, and did not have an intention of moving, although slightly less compared to the national average. Nearly half of those who intended to move in the next two years wanted to be within 15 minutes walking distance to their current home or move within a neighbouring area, showing strong connections to the area. More than two thirds indicated a satisfaction with the area, standards of living, surroundings and friendships, which is comparable to the national average. This is a strong positive indicator for the intention of longer term residency.

The over 65s age group had comparatively a high level of social capital compared to the younger ages. Couples without children and families with children also reported higher levels of social capital. As such, local connections and networks may be more important for people with particular lifestyles and in specific stages of their life. Social capital may increase with longer term residency as those who had lived in the area for more than 10 years had the highest level, with levels increasing with the length of residency.
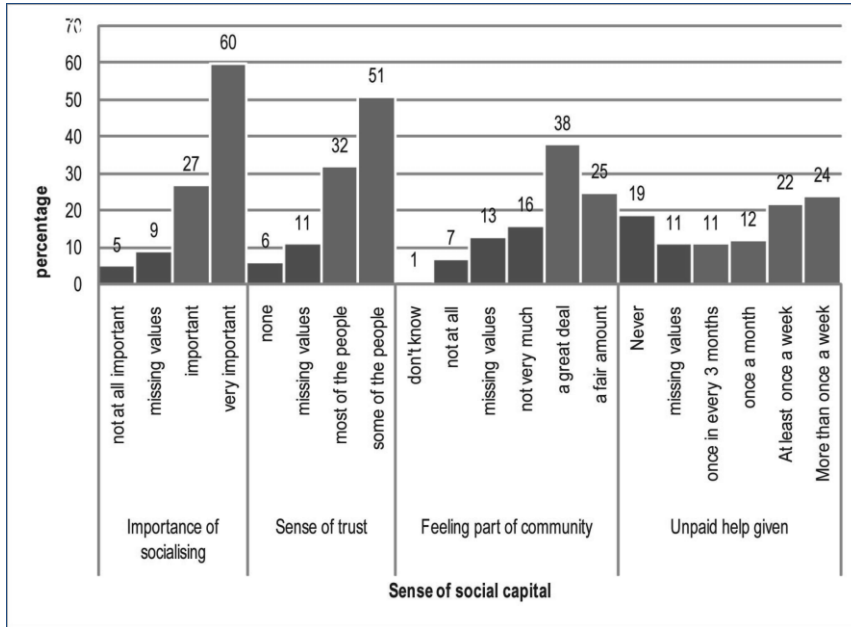
Figure 2: Social capital measurements in Braunstone

4.1 RESPONDING TO NEEDS OF DIFFERENT GROUPS

The design of neighbourhoods such as Braunstone should be fine tuned to the needs of smaller groups, in order to aid the expected growth of social capital. Patterns of socialising vary at a fine grain and therefore the physical design of facilities and neighbourhoods needs to cater for this variation.

As required by the demographic profile, local facilities would need to be responsive to the emergent needs of groups if a growth of social capital is to be encouraged through better use of facilities. For example, the elderly liked to socialise rather than engage in physical activity, youth did not use the facilities for socialising while those with low incomes found that activities did not cater for their needs. Families with children had expressed concerns of anti social behaviour which prevented them from using the facilities more. ,

For those inclined to walk, such as those without cars, the perceived safety of the environment was a clear incentive, whereas for others, such as those with cars, comfort and convenience were important. A poor quality environment and lack of access to services affects walking behaviour and therefore the social interactions of those with low income. As such, a detailed understanding of expectations needs to be taken into account when deciding the priorities.
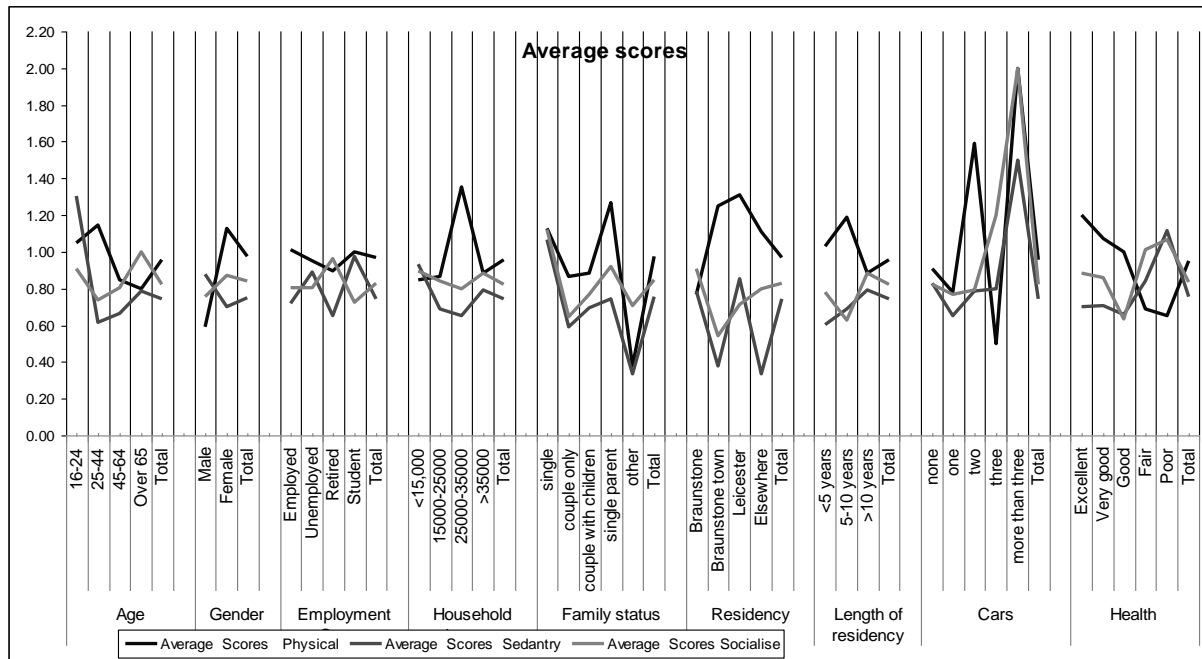
. Figure 3: levels of social capital in groups split by nature of activity

4.2 RESPONDING TO LOCAL PATTERNS OF USE

Braunstone and non-Braunstone residents used the local facilities for different purposes. For locals, especially longer term residents, they were mainly social hubs to meet friends and family as well as for skills enhancement... Social spaces, such as the waiting areas, were used for casual connections such as a quick chat among those who were attending classes or waiting to pick up children from a crèche. The library creates a range of spaces where there is opportunity for interactive bonding such as places for coffee mornings, with adjacent spaces of relative isolation for quiet study. In comparison, the Leisure Centre offers potential for short casual connections encouraging weaker bonds among the diverse range of people that use it, which plays an important role in social capital. The arrangement and positioning of spaces in facilities can add to the ambience needed for the different forms of bonding, bridging and networking which take place. . In places such as Braunstone where strong bonding capital exists, local facilities and services can play a significant role in fostering better health. Social capital can influence behaviour and choices to adopt a healthy life-style thereby contributing to improve wellbeing and also provide informal support and care.

For non-residents of Braunstone, the facilities were places for physical leisure activity in addition to skill enhancements. The participation of outsiders within the community could contribute positively to counteract the stigma and isolation from Leicester City that Braunstone suffers from, and promote the area as an inclusive place. Encouraging bridging and linking social capital is important for Braunstone if steps towards a mixed tenure approach are to be promoted.

4.3 RESPONDING TO NEEDS OF LOCALITIES

The Braunstone Park divides the area into two distinct parts: the North and the South. Poor connectivity and limited pedestrian routes across the park between these two neighbourhoods had deterred walking. Braunstone is known to have previously suffered from lack of services with closures of existing services worsening the situation (Hickman 2008). Accessing services within the local and surrounding areas by public transport was also seen as a problem.

The relative walkability of the North was higher as measured by perceptions on the walking environment, area connectivity and access to services by walking and public transport. Distance to services, personal security concerns, cleanliness (state of the gardens, litter on the street), condition of pavements, lack of street lights and pedestrian crossings were problems highlighted in both the North and the South. These 7

are likely to have a negative impact on the quality of the walking environment, thus social capital. Using public transport to access services remained difficult, especially for those living in the South. In the North, distance to services was the main barrier to walking, exacerbated by a lack of time to access services by walking in general. In both the North and especially the South, accessing services located in the neighbouring areas by public transport remains difficult, as seen by the bus route map. Therefore, a combination of factors such as low car ownership, relatively poor public transport and low average household income and better access to services in the North have contributed to the higher level of social interactions within the area (figure 4). This may have impacted the higher levels of participation in social activities and sense of belonging in the North, whilst the higher levels of trust in the South could be related to the higher income levels revealed by the residents as North being the 'dodge city' while the South was 'Texas'.
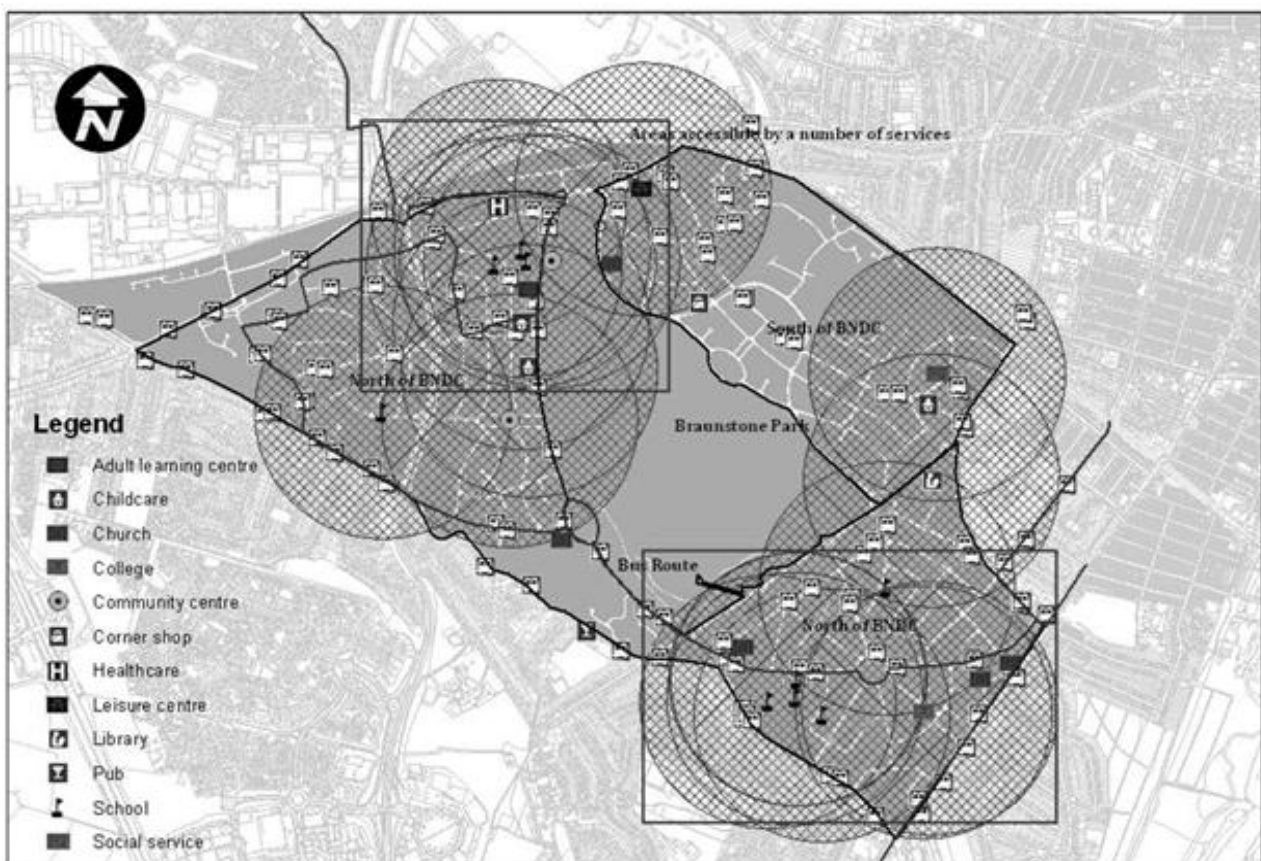

Figure 4: Relative accessibility to the services by walking (considering 400m catchment area for each of the services) in the BNDC area.

4.4 IMPROVING PERCEPTION OF NEIGHBOURHOOD

The sense of belonging in the Braunstone neighbourhood has improved with a perceived higher quality of the physical environment. This is a positive sign in tackling the associated stigma which may prevent people from establishing long term residency. Areas in which people choose to stay longer have distintive identities, thus act a good indicator of the potential to develop social capital (CABE 2001). However, 'less pride' to be a resident of Brausntone points to underlying issues associated with 'stigma', rather than the change of the physical appearance of the area. The respondents held positive perceptions of the walking environment when views, landscaping, shade trees and design of the streets were considered of higher quality. The sense of pride in where one lives that creates feelings of belonging is an important contributor to social capital. This also influences the individuals' decision on local participation and networking. Therefore, the stigma associated with being a resident of Braunstone needs careful consideration if the estate is to integrate with Leicester City for longer term sustainability.

5.0 CONCLUSION

Within the scope of this study it was not possible to explore all issues related to urban design and social capital in Braunstone. However, it is clear that the physical environment, including facilities and buildings, can provide opportunity for social interaction that encourage people to reside in an area in the longer term, encouraging social capital to evolve. As such, facilities and buildings provide a mediating role in developing social capital in a community. Several indicators and proxies used suggest facilities and buildings, such as the Brite Centre and Leisure Centre, have contributed to social interaction and provided for the needs that encourage people to stay in the area for the longer term.

The new facilties have contributed to bringing more types of uses into close proximity for the people of Braunstone and provided for a range of lifestyles and for needs across the ages, but a more fine tuned response addressing the specific needs of groups would increase levels of participation. The importance of improving connections beyond the neighbourhood was clear: to retain people for longer term residency to develop social capital that improves well being. The social division between the two communities living in the North and South was seen as a major problem for the area. A combination of factors, such as poor accessibility by walking and public, absence of a "Central Hub"/"Cultural Heart" and socio-economic circumstances, may have contributed to the lack of social solidarity of the area as a whole.

Although the level of crime has significantly reduced in recent years, concerns about safety remain. The presence of new facilities have not affected the pressing issue of safety in the eyes of the respondents. While it is noted that the nature of activities housed in buildings may prevent 'active frontages' for natural surveillance, as recommended by urban design guidance (DETR 2000), this is an important consideration to be looked at in contexts such as Braunstone, as it is known that urban design has an influence on the safety of a place. In fact, lack of security was the perceived key barrier to walking. These concerns may contribute to poorer health outcomes, such as fear or anxiety (Huxley and Rogers 2001), and also have a negative impact on people's walking behaviour (WCC 2006). Evidence suggests that the presence of over-grown trees, litter, graffiti, isolated environments and congregation of young people on streets can contribute to the fear of crime (Rodgers 2009).

Overall, evidence suggests that these regeneration initiatives which tackled the underlying causes of the problems in Braunstone have helped to improve the quality of life in the area. Improvements to the physical environment has had a positive effect on social capital as measured by proxy, providing opportunity for interacation and have provided incentives to establish longer term residency in the area. As social capital theory suggests, the nature of social capital proves to be highly context specific and therefore physical attributes or urban design has to be holistically viewed. For example, one of the key attributes we proposed was the connectivity of an area. The case study looked at the use of facilities and walkability that relates to movement structure, mixed use and local facilities. However, these issues were clearly connected to attributes that deal with diversity within which we had proposed that the life cycle and life style needs of different groups must be addressed. This reiterates the need for sustainable regeneration initiatives to holisitically view the problem because a 'one size fits all' approach cannot be prescribed. A bottom up perspective with solutions emerging through needs of the communities at its heart would still be the answer.

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