

## **Research Space**

Project report

**Scoping review of literature evidence on community Activation projects and their evaluation**

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# **SCOPING REVIEW OF LITERATURE EVIDENCE ON COMMUNITY ACTIVATION PROJECTS AND THEIR EVALUATION**

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## INTRODUCTION

The purpose of this document is to present a review of existing literature, frameworks and empirical evidence in relation to public health initiatives in the UK and elsewhere that were aimed at promoting quality of life and sustainable healthy living through introduction of community activation projects.

The report will highlight the key messages from such initiatives, the mechanisms used to promote community engagement and the strengths and weaknesses of these initiatives. The report will also present briefly the Healthy New Towns (HNT) initiative and will focus on one demonstrator site, the Ebbsfleet Garden City (EGC). It will conclude by discussing briefly evidence from studies that evaluated such initiatives and discuss the key messages that need to be considered for an evaluation of the EGC HNT projects.

## METHOD OF REVIEW

Canterbury Christ Church University library databases were searched for academic peer reviewed journals, reviews, research reports and articles that produced both qualitative and quantitative data on the topic of the scoping review. Google Scholar and specialist library database search engines were also used to search policies, independent reviews, articles and other documents related to Healthy Cities, Healthy New Towns and Ebbsfleet Garden City in particular.

Keywords used to search for relevant material were: healthy cities, healthy towns, Ebbsfleet development, Garden Cities, community cohesion and behaviour change.

Criteria for including relevant material was primarily based on data that was from primary sources, peer reviewed, endorsed organisations and no older than eight years. However, some seminal papers were included which although dated offered a valuable contribution to the basis of this review.

In the following sections, key highlights from the findings of the review are presented.

## BACKGROUND OF COMMUNITY ACTIVATION INITIATIVES

The United Nations (2014) estimate that over half of the world's population live in urban areas and by 2050 this number is projected to increase to 66%. The growth of urbanisation over the years has contributed to economic growth, a reduction in poverty, increased levels of education and greater

opportunities for social, cultural and political participation (United Nations, 2014). Despite the growth, effectiveness and opportunities facilitated by the urban infrastructure, it has perhaps overlooked how people utilise and experience life in these settings (Carmichael, 2017). Urbanisation has been suggested to have led to unhealthy environments for many of its residents, through increased supply and demand, leading to a fractured infrastructure (United Nations, 2014).

Many cities have now become obesogenic environments, densely populated, lack of green spaces, access to vast convenient food outlets and an increase in transportation (Percival, 2015). This obesogenic environment has ultimately impacted on the health and wellbeing of populations, through increased levels of non-communicable diseases, increased levels of obesity, physical inactivity and unhealthy eating habits (Percival, 2015). Moreover, an increase in the prevalence of non-communicable diseases (cardiovascular disease, cancer and diabetes, among others), unhealthy eating, obesity and physical inactivity, has a direct impact on health and wellbeing, impacting on all levels of society (World Health Organization (WHO), 2010).

According to WHO (2018b), over the last four decades obesity has tripled with an estimated 650 million people classified as obese in 2016 and 41 million under five children. In fact, obesity is attributable to more deaths than that of malnutrition (WHO, 2018b). Being obese can lead to other non-communicable diseases, such as cardiovascular disease, diabetes and cancer (among others) (WHO, 2018a). In the United Kingdom (UK), an estimated 68% men and 58% of women were classified as overweight or obese in 2015 (NHS Digital, 2017), costing the NHS in England £5.1 billion (Department of Health (DH), 2016). Furthermore, non-communicable diseases are attributable to 71% of all deaths globally and are linked to poverty (WHO, 2018a).

In 2007, Foresight were commissioned by the UK government to produce a report on sustainable solutions to tackle the obesity epidemic (Government for Science (GS), 2007). This report formed the basis of the UK's Government Strategy on Obesity (Healthy Weight, Healthy Lives, 2008), in which obesity was recognised as a complex problem and thus needed a multidimensional approach to address this public health priority (Department of Health (DH), 2008).

Moreover, the obesity epidemic has taken nearly thirty years to develop and tackling this problem will involve changing social values and attitudes, which will take just as long (GS, 2007). The Government proposed to invest £30 million in the Healthy Community Challenge Fund (Healthy Towns Programme), that aimed to trial and stimulate innovative whole town approaches to change and improve environments that encouraged obesity and physical inactivity (Cummins et al., 2016). This

competitive tender process encouraged local authorities to focus on innovative interventions to increase physical activity and healthy eating at a local level (Cummins et al., 2016). Local authorities were also encouraged to bring changes to the infrastructure of a town and empower communities to take action to collectively improve health and wellbeing in the area (DH, 2008).

### Healthy Cities

The World Health Organization (WHO) (2018c) states that any city, regardless of its current health status can be a 'Healthy City'. Being conscious of the populations health needs and continually striving to improve health is key in be a 'Healthy City' (WHO, 2018c). It is more concerned with the process, creating opportunities to improve health, rather than specific outcomes (Taylor, 2010). Furthermore, its objective is to put health at the centre of political and societal agendas to focus on the determinants of health (WHO, 2018c).

A 'Healthy City' acknowledges that the determinants of health significantly impact on health and wellbeing of populations at a macro, meso and micro level (WHO, 2018c). The social determinants of health are defined as those factors that influence the way in which we live our lives (education, poverty, housing and the environment, among others) (Dahlgren and Whitehead, 1991). Factors that can impact positively or negatively on the social context in which we are born, grow, live, work and age (WHO, 2018c).

This social ecological theory to health recognises that our health is determined by a complex system of determinants that influence individual choices and behaviour (Bronfenbrenner, 1994). In fact, it has been acknowledged that addressing the determinants of health is more important than health care (The Kings Fund, 2018). The success and improvement over the years of the National Health Service (NHS) and the advancement in technology and life-saving treatment and drugs has eradicated many diseases and enabled an increase in national longevity (NHS England, 2014). However, despite an increase in longevity, we now live in a world plagued by non-communicable diseases and an increase in morbidity (NHS England, 2014).

The 'Healthy City' approach is one that requires collaboration across all public, private, voluntary and community organizations to facilitate opportunities to tackle the determinants of health (WHO, 2018c). The approach is a paradigm shift from focusing on individual risk factors that contribute to ill health and a decrease in wellbeing, to one of facilitating opportunities for empowerment, participation, ability and autonomy through a whole systems approach (Taylor, 2010: WHO, 1998).

The 'Healthy Cities' approach is one which requires long term participation to achieve radical change of the traditional institutions and their way of working, that exist within the city (Taylor, 2010). Many of the Cities that have signed up to this approach have successfully achieved to move forward within the framework set out by the WHO (Taylor, 2010). However, the progress of some cities has been criticised for just signing up to be awarded a 'healthy' status yet, failing to address the determinants of health (poverty, unemployment and housing) (Taylor, 2010).

Furthermore, the WHO 'Healthy City' approach has been criticised as a top down approach, which may have impacted on the level of community participation needed to achieve sustainability and success in improving the cities health and wellbeing outcomes (Patrick, Dooris and Poland, 2016). A lack of a collective theoretical framework and model are suggested as barriers to the 'Healthy City' approach (Taylor, 2010). Evaluation of the effectiveness of the Healthy Cities approach has been highlighted as a challenging task and thus the evidence base is lacking (Taylor, 2010). The nature of implementing holistic and local context actions has led to lack of clarity on what needs to be evaluated, by whom, for who and how (Taylor, 2010). The need to produce evaluations in order to justify and add credibility to the actions implemented has also been suggested as a reason for a lack of evidence (Taylor, 2010).

However, the WHO claims the 'Healthy Cities' approach is a long-term process in which any significant change in health and wellbeing outcomes will take at least ten years to become evident (WHO, 2018c). Furthermore, they recommend that evaluations should be focused on the process and areas of significant change rather than specific health outcomes (WHO, 2018c).

### Healthy New Towns

In 2014 the Five Year Forward View (NHS, 2014) proposed to transform health and health care in England, by harnessing new ideas and perspectives in relation to prevention of ill health and the delivery of services. The Healthy New Towns initiative is one such approach, that illustrates the NHS' proposed changes to improve the health and wellbeing of communities in England and tackle the obesity crisis (Bowkett and Norman, 2018; Iacobucci, 2016).

The purpose of this initiative is to build strong partnerships and work collaboratively with housing developments to provide environments in which communities can be empowered to promote health and wellbeing, prevent ill health whilst maintaining independence (Norman and McDonnell, 2017). By putting health at the centre of design and planning, the 'Healthy New Towns Programme' aims to

create innovative inclusive public spaces that encourage community cohesion, increased physical activity and healthy eating (Norman and McDonnell, 2017).

This scheme, like the Healthy Towns programme, was competitively tendered, which invited local authorities to propose innovative interventions and strategies to address their local health needs (Norman and McDonnell, 2017). However, the political pressure to demonstrate intervention effectiveness led many stakeholders in the Healthy Towns programme to resort to existing interventions and thus the innovative element was lost (Goodwin et al., 2013)

By combining these approaches with evidence on behavioural insights, embedding a healthy ethos throughout the local schools and use of advanced technology, the intention was to facilitate an environment that promoted sustainable health and wellbeing in a holistic and innovative way, far removed from established and traditional strategies and methods (Bowkett and Norman, 2018).

Furthermore, the programme intended to collect evidence through evaluation processes to inform good practice and spread the learning to other areas (NHS England, 2017). Monitoring impacts of programme implementations and their impact on health outcomes, evaluating the success of the integration of health, planning and design process would ensure the growth of the evidence base to inform future practice (Norman, McDonnell, 2017). The main challenge of evaluation of such innovative and heterogenic natured programmes is that it is a long term, subjective and difficult to measure task (Goodwin et al., 2013). Moreover, the change in political climate, austerity measures, time constraints and lack of explicit direction of evaluation from the government, can be seen as barriers to producing robust evidence on health impacts (Goodwin et al., 2013).

In March 2016, ten HNT 'demonstrator sites' across England were successful in their bid to receive support from the NHS, Public Health England and the WHO (NHS England, 2017). This support was given to help these towns to help fast-track implementation of planning and design of the areas to creatively use spaces to improve and promote health and wellbeing (NHS England, 2017). The sites are diverse, with some designing a new community from scratch, whilst others focus on renewing existing assets and introducing features that encourage healthier living in existing and new communities. However, they all share the 'HNT philosophy' of building healthier environments and delivering healthcare in new and more integrated ways through a holistic place-based approach. Each site defined the scope of its programme locally, reflecting the health profiles of their current and anticipated populations. Common key themes that emerged across all 10 sites were: obesity levels,



active ageing, healthy eating, better use of new technologies in health prevention and promotion, and reshaping the delivery of healthcare services.

Ebbsfleet Garden City in Kent was among the towns or 'demonstrator sites' (Bowkett and Norman, 2018). In the next section, the key characteristics of the EGC Healthy New Town will be discussed briefly.

## EBBSFLEET GARDEN CITY

In 2015 the Government created an Urban Development Corporation at Ebbsfleet to fast-track the development and delivery of a new Garden City through applying a strategic approach (Department for Communities and Local Government (DCLG), 2014). The vision of the Urban Development Corporation (UDC) (2016) is to build and improve the local infrastructure, building 15,000 new homes and creating 30,000 new jobs. It aims to create a vibrant environment that attracts new businesses, education, research and leisure pursuits.

The NHS England (2018) state that the priorities to be addressed in Ebbsfleet, by 2021 is the overall Quality of life indices to be increased by 10%. Included in this proposal is the need to address levels of childhood and adult obesity, improve healthy eating, increase access to green and blue spaces, reduce incidences of diabetes, deliver new homes and foster a community cohesive area (among others) (NHS England, 2018). In fact, the area of Ebbsfleet falls under the borough of Dartford in Kent and has a significantly high prevalence of obesity, low intake of fruit and vegetables and high prevalence of physical inactivity compared to many parts of England (Kent County Council (KCC), 2015).

The principles of a Garden City according to the Town and Country Planning Association (TCPA) (2014), are, it is primarily a holistically planned new settlement that offers affordable housing, accessible work for its residents but, also employing techniques in planning and development to enhance the natural environment. It also requires a strong leadership with a common shared vision, which facilitates communities to have a voice and ownership of actions and assets within the locality to build on a sustainable future (TCPA, 2014). Having a mixture of housing tenure and access to blue and green spaces, together with an integrated transport system that allows the healthiest choice to be the easiest choice is also a key principle (TCPA, 2014).

However, concerns were raised at a consultation ran by the DCLG (2014), which conferred with local residents, businesses and local authority figures of Ebbsfleet and surrounding areas. The concerns

raised were that the £200 million funding received would not be enough to facilitate the infrastructure change needed (DCLG, 2014). Concerns were also raised as to the process of reassigning authority over when the Development Corporation ended its time at Ebbsfleet (DCLG, 2014).

The TCPA (2015) suggest that although Urban Development Corporations have been efficient in driving change they have not been so successful in connecting with the local community and thus the desired outcomes have been less effective. Furthermore, there is inefficient indication of key Garden City principles, such as social housing standards and long-term ownership of development values (TCPA, 2015). Without engaging with the community and securing long-term ownership of development values the intended aims of the programme have the potential to fail through a lack of community cohesion (TCPA, 2015).

### Community Cohesion

Community cohesion is defined as when groups share common circumstances, values or visions of the neighbourhood, forming collective ties and engaging in social participation (Vaandrager and Kennedy, 2017). Social capital is gained through community cohesion when groups form, and ties are made through a shared interest, trust, cooperation and reciprocity (Kent and Thompson, 2014). This social support can help individuals to manage stressors that they may face in every-day life, this is referred to as a resource within a salutogenesis theory (Antonovsky, 1979).

The salutogenesis theory posits that generalised resistance resources (money, knowledge/skills, coping strategies and social support, among others) are resources that an individual can utilize to counteract stressors of life and positively impact on health and wellbeing (Antonovsky, 1979). A sense of coherence is fundamental also within this theory, as without understanding causes of stress, belief in ones' ability to cope and a sense of meaning and purpose, the ability to identify and utilise resources available would be diminished (Antonovsky, 1979).

The salutogenic theory focuses on the interaction between the individual, community and environment (Vaandrager and Kennedy, 2017). It is in essence an assets-based approach, in which communities are made aware of the resources available within their neighbourhood and are empowered to utilise these to take a greater control over their lives (Vaandrager and Kennedy, 2017). Healthy communities within a salutogenic approach would be those with strong community cohesion and social capital, healthy green and blue spaces, an infrastructure that facilitates healthy eating, physical activity and access to services and the ability to be independent (Vaandrager and Kennedy,

2017). All these factors can contribute positively to health and wellbeing of the community, by increasing self efficacy, self-esteem and healthy choices (Vaandrager and Kennedy, 2017).

In accordance with the salutogenic theory neighbourhoods that suffer multiple disadvantages are referred to as riskscape and in fact should in fact be named resourcescape (Vaandrager and Kennedy, 2017). However, the evidence base is scant in relation to salutogenic approaches in public health but, asset based, and locality development do share many attributes (Vaandrager and Kennedy, 2017). Furthermore, promoting community cohesion is often problematic and can lead to unintended negative outcomes for some members of the community (Vaandrager and Kennedy, 2017). Interventions that focus on social cohesion and facilitate a focal point within a community, can unintentionally exclude some residents (What Works Wellbeing, 2018).

The 'Places, spaces, people and wellbeing: full review (What Works Wellbeing, 2018) identified areas in which interventions to boost social relations through improvements to the local infrastructure had negative outcomes. For example, although a study by Porter and McIlvaine-Newsad (2014) identified the use of community green spaces to grow food had many benefits (increased physical activity, social relations, healthy eating, among others), it highlighted barriers for some community members.

The study explored community gardening in a rural town in Illinois, where there were several sites chosen to develop and utilize green spaces to encourage participation in tackling food insecurity and healthy eating (Porter and McIlvaine-Newsad, 2014). However, several sites were inaccessible to many residents as they were away from the central site and difficult for people on low incomes, reduced mobility and limited access to transport to participate in the activities (Porter and McIlvaine-Newsad, 2014). Furthermore, once the community garden was established and groups formed, issues over whether other community members who did not participate should enjoy the fruits of their labour became in some instances a tension (Porter and McIlvaine-Newsad, 2014)

The study did highlight that community gardening had many benefits to the community and individuals' health and wellbeing (Porter and McIlvaine-Newsad, 2014). Engaging in the act of gardening increased levels of physical activity, decreased isolation as the intervention encouraged social interaction irrespective of social status, ethnicity or age (Porter and McIlvaine-Newsad, 2014). It also encouraged some members to emerge as leaders, who shared their knowledge and expertise with others, which in turn helped to establish a sustainable element to the intervention (Porter and McIlvaine-Newsad, 2014).

Although this study explored an urban setting community garden intervention, it did implement the use of an urban template, which may allow this study to be transferrable. Moreover, although the study was situated in the United States of America, issues of food insecurity, the need to increase healthy eating, increase community cohesion and physical activity are all transferrable issues faced in England.

A mixed methods study carried out in Sydney Australia highlighted that changes in community infrastructure to introduce cycle paths and encourage physical activity had positive and negative outcomes for local residents (Crane et al., 2016). The benefits of a neighbourhood with more walkability and cyclability is acknowledged as increasing quality of life through increased social cohesion and benefits of physical activity (Crane et al., 2016). This study did highlight that the implementation of cycle paths had led to an increase in cycle usage of local people, predominantly for commuting and had a positive impact on their quality of life (Crane et al., 2016).

However, the study highlighted the importance of communication and education with regards to cycling and use of cycle paths (Crane et al., 2016). Within the study some residents felt their voices were not taken into consideration in regard to safety issues of changes in road usage and road rules (Crane et al., 2016). Some businesses reported a decrease in customer thoroughfare and lack of parking had the potential to impact on their livelihoods and other community members stated affordability of a bicycle was a barrier to using the cycle paths (Crane et al., 2016).

Crane et al. (2016) suggest the Theory of Planned Behaviour (Ajzen, 1991) may explain why some residents are more willing to adapt to cycling as a means of transportation than others. The Theory of Planned Behaviour (Ajzen, 1991) posits that an individual's belief system, values, habits, together with barriers and facilitators all interact to determine behaviour change. For example, in order for an individual to engage in cycling they must have the skills and knowledge to ride a bicycle, have skills to be road safety, have the self-efficacy of riding and be intrinsically motivated to do so (Ajzen, 1991). Furthermore, being able to afford a bicycle and having accessible routes to and from their desired destinations are influential in the uptake of a new behaviour (Ajzen, 1991).

Although this study was from Australia its findings are transferrable to other countries, as it highlights fundamental human aspects of human behaviour in regard to behaviour change and how barriers and facilitators can have an impact (Crane et al., 2016).

The 'Places, spaces, people and wellbeing: full review (What Works Wellbeing, 2018) identified encouraging evidence that a variety of community infrastructure interventions are effective in improving health and wellbeing in a community, despite the lack of more high-quality evaluations of interventions. Furthermore, it demonstrated the need to identify and address barriers, allowing access for all residents is key in being inclusive and encouraging participation to facilitate effective behaviour change and sustainable outcomes (What Works Wellbeing, 2018).

This review also highlighted the lack of high quality evidence available which limited the ability to draw conclusions on which intervention approach was most effective (What Works Wellbeing, 2018). However, it suggested that the qualitative data was of better quality than that of the quantitative (What Works Wellbeing, 2018). The quantitative data lacked in comparative analysis and the nature of cross sectional studies and lack of repeated measures limited the conclusions to be drawn whether intervention approaches were effective in the long term (What Works Wellbeing, 2018). Throughout the whole process of community infrastructure interventions, the collaboration and participation of all stakeholders is essential, together with consistent evaluation of the processes of change is needed to add to the learning and evidence base for future work (What Works Wellbeing, 2018).

## EBBSFLEET COMMUNITY ACTIVATION PROJECTS

Ebbsfleet Garden City employs three community activation tools to encourage positive behaviour change and community cohesion within the existing and new communities (EDC, 2018b). These community activation tools are arts culture events and meanwhile uses, sports, leisure and physical activity, and healthy eating and food growing (EDC, 2018b).

### Arts culture events and meanwhile uses

The Moving Memory Dance Theatre Company offer a series of creative movement workshops to older residents in Ebbsfleet Garden City to help balance improvement, flexibility, reduce isolation and help participants to lead healthier fulfilling lives (EDC, 2018b). Creative movement has the potential to stimulate and provide positive benefits to physical, cognitive and social skills of the participant and to contribute to healthy aging (Cruz-Ferreira et al., 2015). Moreover, there is growing evidence of the benefits of creative moving and the link between healthy aging and the arts and culture (Vella-Burrows

et al., 2013). It helps participants to increase their levels of physical activity, enhance social capital and cohesion and promote independence and longevity (Vella-Burrows et al., 2013).

A festival named 'Gathering: create, grow, thrive' is scheduled to run in Ebbsfleet in 2019 (EDC, 2018b). A community initiative to address issues of cohesion, obesity, diabetes and isolation, through a mixture of performances, talks, activities and a shared meal (EDC, 2018b). In preparation of this event residents have been asked (through advertisements), to initiate projects to help shape the activities at the festival (EDC, 2018b). Focusing on growing, making and eating food with an intention to increase physical activity, healthy eating through arts and culture (EDC, 2018b). This preparation stage will allow the identification of local champions in order to promote sustainability, together with continual evaluations to inform future interventions (EDC, 2018b).

Evidence suggests that the identification of local champions can increase individual wellbeing and social capital, through the exchange of knowledge, strengths and creativity of residents (Porter and McIlvaine-Newsad, 2013). Moreover, local festivals can increase levels of pride and belonging and a facilitator to cultural integration at an individual and community level (What Works Wellbeing, 2018). Furthermore, by seeking community participation within the planning of the festival can empower residents to take ownership and promote participation (Whitford and Ruhanen, 2013).

### Sports, leisure and physical activity

Ebbsfleet Garden City launched an online intervention app (Betterpoints), that runs alongside Get Active in Ebbsfleet programme (EDC, 2018b). Residents are encouraged to download the 'Betterpoints' app on a smartphone to log physical activity undertaken and in doing so will be rewarded points, which are exchanged for vouchers (EDC, 2018b). These vouchers can be redeemed in a variety of high street or online stores or residents have the option of donating their rewards to a charity of their choice (EDC, 2018b). New cycle paths have been installed in Ebbsfleet and cycle challenges advertised locally to encourage residents to participate in the programme and benefit from being active (EDC, 2018b). EDC have also funded a cycle park in Gravesham to provide a safe environment for younger residents to learn how to ride a bicycle safely (EDC, 2018b).

This is an NHS backed project to address the issues of obesity and physical inactivity and employs a nudge system to incentivise residents to lead healthier lives (EDC, 2018b). The use of smartphones has increased over the years and this style of intervention has the potential to appeal to a significant part of the community (Weber et al., 2018). It may also be seen as a useful tool to influence behaviour

change and create new 'norms' on a relatively cost effective and large audience scale (Weber et al., 2018).

However, the British Medical Association (BMA) (2012) argue that this kind of intervention will not be sufficient enough on their own to be effective in changing peoples' behaviour. Behaviour change is a complex subject with multi-levels of influencing factors and incentivising nudge tactics are unsustainable (BMA, 2012). Furthermore, these types of interventions have failed to produce robust evidence on the impacts of improving choices and healthy lifestyles (BMA, 2012). Moreover, use of apps such as 'Betterpoints' is subject to self-report measures and therefore open to bias and misleading data (Weber et al., 2018).

### Edible Ebbsfleet

The Edible Ebbsfleet activation initiative aims to support and work alongside local residents to grow food in hanging baskets, in parks, gardens and along streets within the neighbourhood (EDC, 2018a). It aims to promote the benefits of healthy eating through education, participation and collaboration (EDC, 2018a). By facilitating the opportunities for all residents to grow, cook and eat produce collectively cultivated, it aims to encourage this behaviour to become a normal part of residents lives but, also improve the image of the area (EDC, 2018a). EDC have commissioned a local community interest company to support the growth of the Edible Ebbsfleet programme (EDC, 2018a). Together with healthy eating and growing education programmes within existing and new local schools (EDC, 2018a).

Having access to green spaces and opportunities to connect with nature through gardening has been acknowledged as having strong links to a reduction in obesity and NCD's, increased physical activity, prevention of cognitive decline and social cohesion (The Kings Fund, 2016). Its benefits are far reaching, helping to bridge intergenerational gaps, cultural and social differences through collaboration and a shared common interest (The Kings Fund, 2016).

Edible Ebbsfleet was inspired by the success of 'Incredible Edible Todmorden' (Ebbsfleet Development Corporation (EDC), 2018). Incredible Edible Todmorden, now a limited company was established ten years ago in the North of England by a small group of friends (Incredible Edible Todmorden, 2018). It's aims were to use the process of growing food as a facilitator of community cohesion, change local's behaviour towards the environment and encourage a self-sufficient food growing community (Incredible Edible Todmorden, 2018).

The innovative idea of Incredible Edible Todmorden began with growing food in gardens and disused local land (guerrilla gardening), along streets and outside community buildings (police station etc), linked by what is now a 'green route', encouraging locals to pick the food for free and start to grow their own (Ecologist, 2014). This grass roots bottom up approach used a conceptual model of three spinning plates, to motivate and empower local people to participate in creating a neighbourhood that shared a common interest and thus promote cohesion and social capital (Ecologist, 2014).

The three spinning plates represented community, business and learning, that was influential in creating a clear framework from which to work with to enable sustainability of the project (Incredible Edible Todmorden, 2018). This holistic approach was free from red tape, time frames and problems with funding which allowed outcomes, such as a sharing of knowledge, skills and creativity to naturally develop amongst Todmorden's community (Ecologist, 2014). There are now over 120 Incredible Edible official groups in Britain and over 700 worldwide (Morley, Farrier and Dooris, 2017).

## EVALUATION OF COMMUNITY INITIATIVES

As noted in previous sections, evaluation of healthy living initiatives is always a key issue that has been emphasised by both the initiators of such interventions and the critics of their successes. One common conclusion is that these initiatives cannot be evaluated solely based on the health outcomes of target public health concerns as it is difficult to capture this change due to the short life of the projects and the complex and 'live' character of the activities that these projects may involve. Therefore, inclusion of a process evaluation alongside an outcome evaluation, that is, data collected as part of the process evaluation to explain the outcome evaluation results is a key priority for food public health research (Munro & Bloor, 2010). However, there are very few evaluation studies of the previously discussed initiatives that adopted this holistic approach. A few examples that are relevant to the evaluation of the Ebbsfleet Community Activation projects, will be discussed below.

A research study was conducted of Incredible Edible Todmorden to assess the social, environmental and economic impacts it has had on the local community and highlight the breadth that such an intervention can impact on a community (Morley, Farrier and Dooris, 2017). Using a mixed methods approach (Literature review, Theory of Change workshops, surveys, one to one interviews and social returns on investment analysis), the study aimed to build on existing research (as there was a lack of



robust evaluative evidence), to produce a mixture of quantitative and qualitative data to inform future designs, developments and implementation of similar projects (Morley, Farrier and Dooris, 2017).

Key findings from this research report were, that from the outset of the project there was a 'hands on' and cohesive culture that had a clear vision of intention (Morley, Farrier and Dooris, 2017). The vision of the stakeholders facilitated the formation of a working model and a framework to enable a joined up working approach, a clear message and focus to form a distinctive branding that was easily communicated (Morley, Farrier and Dooris, 2017).

The social impacts highlighted within this study was an increase in physical activity, through volunteering and the 'Green route' (Morley, Farrier and Dooris, 2017). The creative use of land and green space reportedly enhanced the streetscape of Todmorden, giving residents a sense of pride, but also a growth in community cohesion (Morley, Farrier and Dooris, 2017).

The economic impacts highlighted within the study were the benefits of a highly visible and creative branding of Incredible Edible Todmorden (IET), which generated revenue from tourism, business expansion and opportunities and an increase in locally bought produce (Morley, Farrier and Dooris, 2017). In fact, 54% of residents buy local produce, compared to 41% in the UK (Morley, Farrier and Dooris, 2017). Furthermore, the study suggested that for every £1 invested in IET, £5.51 was returned to the Todmorden community (Morley, Farrier and Dooris, 2017).

The environmental impacts of IET were reported as an increase in community participation in growing, cooking and eating food, together with a raised awareness and understanding of sustainability (Morley, Farrier and Dooris, 2017). The IET project is attributable to creating an ethos in the community that growing food is an important factor in everyday life and has become the 'norm' (Morley, Farrier and Dooris, 2017).

However, this study highlighted several barriers to the IET project (Morley, Farrier and Dooris, 2017). Some community members felt that due to the success and high visibility of the IET branding the area was in danger of becoming gentrified (Morley, Farrier and Dooris, 2017). It was also reported that some of the residents felt the IET project was of a 'middle class' ethos and failed to understand the 'working class' food needs within the community (Morley, Farrier and Dooris, 2017).

Furthermore, although IET brought together many different age groups with intergenerational activities it failed to reach or engage the adolescent population within the area (Morley, Farrier and Dooris, 2017). Local traders initially reported tension arising through the giving away of free food and

although IET had attracted many tourists their businesses were not benefiting financially (Morley, Farrier and Dooris, 2017). The study also highlighted the reserve residents had in picking/foraging the local free produce, through fear of contamination from pollution (traffic etc) (Morley, Farrier and Dooris, 2017).

Through the use of comparative data from previous studies of IET, the study overall suggested that the respondents within the study had an increased awareness of sustainability/ buying locally, increase in foraging, increase in physical activity and improved mental health and wellbeing (Morley, Farrier and Dooris, 2017). Although it is hard to determine if IET was solely responsible for an improvement in mental health and wellbeing, the study suggests that the IET model is a transferrable approach that can facilitate a framework for other areas to start small and grow according to their local needs and issues (Morley, Farrier and Dooris, 2017). To bring communities together under a shared/common interest to build cohesion and address local issues, but also facilitate unexpected positive outcomes through the process (Morley, Farrier and Dooris, 2017).

Another research project carried out over six months in Scotland, explored the inter-relationships between health, wellbeing, sustainability and the environment through community gardening (Crossan, Shaw, Cumbers and McMaster, 2018). The research study applied an approach of participant observation and semi-structured interviews, which identified a number of benefits of collaboratively growing food within a community (Crossan, Shaw, Cumbers and McMaster, 2018).

The community projects explored within this research study were primarily focused on urban regeneration (Crossan, Shaw, Cumbers and McMaster, 2018). Nearly 90% of the population in Glasgow live within 1000 metres of a derelict site, this area also has a high prevalence of ill health, deprivation and a shorter life expectancy compared to other UK cities (Crossan, Shaw, Cumbers and McMaster, 2018).

The community garden projects across Glasgow do however focus on different a variety of different health outcomes, but all share the use of food growing as a tool to address these issues (Crossan, Shaw, Cumbers and McMaster, 2018). Some of the issues addressed in these grass-roots initiatives are healthy eating, physical activity and sustainability (Crossan, Shaw, Cumbers and McMaster, 2018). They aim to re-engage local vulnerable residents back into the community through a mixture of shared learning and acquiring new skills, promoting cultural integration and community cohesion through joint efforts to maintain and cultivate various gardening projects (Crossan, Shaw, Cumbers and McMaster, 2018).

The study identified that the process of gardening activities led to a variety of learning that went beyond that of horticulture (Crossan, Shaw, Cumbers and McMaster, 2018). For example, the act of participating in group activities led to a sharing and acquiring of skills and information on subjects of individual health, increasing social capital and awareness of the value of citizenship (Crossan, Shaw, Cumbers and McMaster, 2018).

However, the research study identified some barriers to the community garden projects (Crossan, Shaw, Cumbers and McMaster, 2018). Problems of land licences and contractual leases led to a sense of insecurity of the land use (Crossan, Shaw, Cumbers and McMaster, 2018). Community gardens take years to develop and the absence of a long-term lease led some stakeholders reluctant to invest time and effort in a project that's future was insecure (Crossan, Shaw, Cumbers and McMaster, 2018).

The community gardens that matured and developed over time, adding to a more attractive street scape and sense of a community pride and cohesion had an effect of gentrification (Crossan, Shaw, Cumbers and McMaster, 2018). This was seen as detrimental to the health and wellbeing of some of the less affluent residents, as rent and property values increase (Crossan, Shaw, Cumbers and McMaster, 2018). Furthermore, the use of public places, such as parks for community gardens was seen to have a downside (Crossan, Shaw, Cumbers and McMaster, 2018). The volunteers who maintain the garden project seemed to replace the paid staff of the local authorities, this was regarded as a neoliberal ethos of the government, austerity measures and reliance on unpaid volunteer workers (Crossan, Shaw, Cumbers and McMaster, 2018).

Dudley, a county in the West Midlands in England, is one of the nine towns given a 'Healthy Town' status, which received £4.5 million from the Healthy Community Challenge Fund in 2008 (Peters and Jones, 2011). Its aims were to increase the levels of physical activity in the area by transforming and developing local parks into family health hubs (Peters and Jones, 2011). It planned to introduce multi-use game areas, outdoor gyms, walking programmes, cycling routes, cooking sessions and improved surveillance (cctv) to provide safety measures (Peters and Jones, 2011). Its focus was aimed at encouraging families to utilise these facilities to increase levels of physical activity to reduce levels of obesity (Peters and Jones, 2011).

This study represents an immediate impact as it is deemed that addressing and evaluating issues of behaviour change in regard to physical activity and healthy choices is a long-term process (Peters and Jones, 2011). The study used a three level multi-method approach of surveys and data from attendance figures of the parks (Peters and Jones, 2011). It highlighted that within the community

levels of physical activity increased, especially within the child population, with increased use of the facilities on offer (Peters and Jones, 2011). Furthermore, walking and cycling prevalence was identified as having increased since the redevelopment, signage and design of more accessible routes (Peters and Jones, 2011).

However, the study highlighted that a significant number of residents enjoyed the healthy hub sites as places they could visit and relax rather than partake in physical activity (Peters and Jones, 2011). The parks were reportedly more frequently used by children which identified 72% of this population being more physically active (Peters and Jones, 2011). Although the use of self-report measures was used it did indicate that levels of physical activity across the park users had met with the governments recommended guidelines on physical activity (Peters and Jones, 2011). The healthy hubs were also identified as being instrumental in raising awareness of the Change4life campaign and its subsequent benefits in adopting healthier life-style choices (Peters and Jones, 2011).

Safety issues surrounding the use of the parks was a barrier identified at a local level and although cctv was installed, lighting and park rangers employed to create a sense of a safer environment, this was highlighted as a barrier to using the park facilities after a certain time in the day (Peters and Jones, 2011). The study highlighted that the community were unaware of the safety measures in place and this identified the need for an increase in signage and awareness of such measures to increase participation in usage of the parks and their benefits to health and wellbeing (Peters and Jones, 2011).

## CONCLUSION

Urbanisation has many benefits, economic growth, reduction in poverty and increased opportunities for education and social connectedness (among others) however, it is attributable to an obesogenic environment. An obesogenic environment contributes to unhealthy lifestyles, choices and behaviours which impact on individual, community and societal health and wellbeing. The increased prevalence of NCD'S, obesity, morbidity and premature mortality have impacted heavily on our society with economic and social costs at a macro, meso and micro level.

It has now been acknowledged that the built environment is a determinant of health that influences and impacts the way we are born, grow, live, work, play and love. The built environment has restricted our ability to be autonomous and entirely responsible for our health and has been a complex problem building for many years. Consequently, addressing these issues will require a considerable amount of

time, collaboration and an approach that involves all levels of society. Health needs to be put at the very heart of policies, planning, designing and building to provide opportunities for individual and communities to take control of their health and wellbeing.

Ebbsfleet Garden City is an ideal opportunity for such a whole-systems approach that can address the many issues faced by the local community. Starting from scratch, with government funding and support from other partners, the Ebbsfleet Development Corporation are in a position to show other areas that this innovative approach can be successful. However, the evidence base is lacking in robust data that can inform best practice. Furthermore, political climate change and pressure to deliver effective outcomes are potential barriers to funding and adopting an innovative approach.

The evidence suggests that for developments such as Ebbsfleet to be successful explicit policies, frameworks and definitions of key concepts and theories are needed to facilitate a shared understanding and vision of methodology and implementation. Collaboration and participation of all stakeholders including community members is key to enabling an environment that has the potential to be sustainable.

Evidence suggests that continual evaluations of such developments should focus on the processes of delivering the programme rather than the health outcomes intended through the interventions. Time should be given to such processes, as issues addressing behaviour change is a complex phenomenon that may take many years to have noticeable outcomes. Perhaps this a reason for the lack of literature and evidence in relation to Ebbsfleet Garden City.

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