

<b>Institution: Staffordshire University</b>
<b>Unit of Assessment: 26 – Sport and Exercise Sciences, Leisure and Tourism</b>
<b>Title of case study: Promoting Healthy Living in Deprived Communities (Case Study 2)</b>
<p><b>1. Summary of the impact</b></p> <p>We have been involved in initiatives to improve the health behaviour of ~20,000 people from deprived communities, with a focus on increasing levels of physical activity, dietary change, and engagement with natural environments (e.g., parks). We have worked with communities to ensure the sustainability of these positive changes. Further, we have disseminated our research widely through engagement with stakeholders to influence practice and policy and through media coverage. These impacts are based on our research which has demonstrated that to change health behaviours multiple levels of intervention are required and we have focused on two of these levels; community engagement and changing the environment.</p>
<p><b>2. Underpinning research</b></p> <p>Our research has been conducted within a social-ecology framework, with the aim of promoting healthier lifestyles in deprived communities. The approach to healthy living has focused on health improvement through physical activity, healthy eating and engagement with the natural environment.</p> <p>The impacts reported in this case study flow from research ongoing since 2006. We began with a project funded through the MRC National Preventive Research Initiative [1,2,5] in which attitudes to, and engagement in, physical activity and health outcomes were mapped in deprived inner-city communities. The data highlighted that the majority of residents (~65%) in these communities were not physically active, but were not ready, or interested, in changing their behaviour [1,2]. Analysis of individual and area-level physical activity correlates enabled us to identify a need to improve both environmental factors, such as access to quality green space, and to engage with communities at the individual level in order to effect sustainable behaviour change. It is these key findings that has guided our subsequent initiatives to improve health behaviours, and has led to two notable initiatives.</p> <p>In 2008 we embarked on a Natural England funded project (ProGreSS) to engage residents of deprived urban communities with local green space [6]. We engaged with the community and local partners to increase use of a four-hectare public park. Physical site improvements and community events were undertaken and follow-up data outlined improvements in residents' perceptions of the park and antisocial behaviour, which reflected a real reduction based on police data [3,4].</p> <p>In 2009 we secured funding for a Knowledge Transfer Partnership (KTP) in partnership with NHS Stoke-on-Trent and delivered a large scale community-led intervention to reduce health inequalities relating to physical activity and healthy eating [7]. Specifically we aimed to improve attitudes to, and engagement in, health-enhancing activities in deprived communities. Three full-time community development workers were employed to deliver the project and each was allocated to a deprived area in Stoke-on-Trent to facilitate the development of interventions defined by community members. This bottom-up, community-led approach developed a wide range of activities, including physical activity classes (e.g., zumba, aerobics) and community healthy cook and eat sessions. We also built on findings from the Natural England ProGreSS project regarding the importance of green space quality (not just quantity) and activities that can take place there, and provided events to promote community use of local green space (e.g., community picnics, community allotments). Pre-post intervention data demonstrated that levels of physical activity and healthy eating improved in the three areas, with concurrent increases in social capital.</p> <p>Collectively this research has resulted in eight papers, 15 conference presentations and has been supported by three completed funded projects, and one which is ongoing. Our research was begun</p>

by Professors Davey and Cochrane who left in January 2010 to move to the University of Canberra and have continued to work as collaborative partners. Since January 2010 the work has been led by Associate Professor Chris Gidlow and supported by Professor Marc Jones. It has also been conducted in collaboration with NHS Stoke on Trent and Stoke-on-Trent City Council.

**3. References to the research**

All the research outputs below are peer reviewed and have been the result of externally funded projects.

- [1] Cochrane T., Davey R.C., Gidlow C., Smith G.R., Fairburn J., Armitage C.J., Stephansen H., and Speight, S. (2009). Small area and individual level predictors of physical activity in urban communities: A multi-level study in Stoke on Trent, England. *International Journal of Environmental Research and Public Health*, 6(2), 654-677.
- [2] Gidlow, C., Cochrane, T., Davey, R. C., Smith, G. and Fairburn, J. (2010). Relative importance of physical and social aspects of perceived neighbourhood environment for self-reported health. *Preventive Medicine*, 51(2), 157-163.
- [3] Gidlow, C. J., and Ellis, N. J. (2011). Neighbourhood green space in deprived urban communities: issues and barriers to use. *Local Environment* 16(10), 989-1002
- [4] Gidlow, C. J., Ellis, N. J., and Bostock, S. (2012). Development of the Neighbourhood Green Space Tool (NGST). *Landscape and Urban Planning*, 106, 347- 358.

The research has been supported by the following grants:

- [5] MRC funded National Preventive Research Initiative (£304,000) awarded to Professor Rachel Davey and Professor Tom Cochrane: Social Ecological Mapping of Physical Activity Behaviours and Health Outcomes in Deprived Inner-city Communities (May 2006-Sept 2008).
- [6] Promoting Green Space in Stoke-on-Trent (ProGreSS): Natural England funded project (£48,793) to engage residents of deprived urban communities with local green space awarded to Dr Chris Gidlow (2008-2010).
- [7] My Health Matters (£245,000): A NHS Stoke-on-Trent and Knowledge Transfer Partnership (KTP) evaluating the use of community-led interventions to reduce health inequalities relating to physical activity and healthy eating awarded to Professor Rachel Davey then led by Dr Chris Gidlow and Professor Marc Jones (2009-2012).

**4. Details of the impact**

Our research has outlined the importance of environmental aspects (e.g., access to green space) and engaging with communities as important drivers in behaviour change. The impact of our work is seen in the positive changes in health behaviours of people from deprived communities resulting from research initiatives which address community engagement and environmental aspects; sustainable changes after the research was completed; engagement with stakeholders to influence practice and policy and dissemination through media coverage.

Our intervention work on the Natural England Funded ProGreSS project reported improvements in the 250 residents’ perceptions of the park and antisocial behaviour, which reflected a real reduction, based on police data over a 12 month period [3, 8]. This is illustrated in the quote of one resident who said “I’m not sitting here, watching my window in case they come throw eggs at me. I haven’t done that for a good 12 months now since you started all this kicking it all off. I think it’s marvellous and it’s made our life a lot better.” [8].

In the ‘My Health Matters’ (MHM) project 18,308 people received health promotion information; there were 11,525 attendances at community events, and of these 1,678 subsequently engaged on a regular basis in community events (e.g., regular attendance at physical activity sessions). Community engagement is evidenced in that during the project 45 volunteers and 15 community

champions were engaged and along with 102 partners ranging from large companies (e.g., B&Q; Co-Op), service providers (e.g., Citizens Advice Bureau), local charities, local media and schools [9]. Levels of physical activity and healthy eating improved in the three deprived areas where the intervention took place, and increased social capital was also observed [9]. The positive change in health behaviours is reflected in quotations from the residents who mentioned “every session has been fun and I have done more exercise now than I have done before” and “before I did My Health Matters ... I wouldn’t even try to eat or try a piece of fruit or veg, but now ... I eat different fruits and veggies and things I thought I would never try.” [9].

The sustainability of our impact is evidenced in that the three full time community development workers funded by the MHM project have had their contracts extended by Stoke-on-Trent City Council [9,10]. Further this work has now been expanded from the three deprived areas as part of the original MHM project to up to 18 areas across Stoke-on-Trent [10,11] under a new My Community Matters scheme (MCM). A change in the environment is evidenced in that the previously underutilised local assets, such as community centres, and allotments, have been developed into fully functioning community hubs staffed by community groups which, with the support of the MHM project and other partners, have been successful in receiving further funding (£60,000) to develop community provision [9,10]. We continue to support the evaluation of community developments work in the city through a part-funded PhD scholarship (half-funded by Staffordshire University and half-funded by NHS Stoke-on-Trent) of the new MCM scheme [10,11]. The sustainability of our impact is also evidenced in the changes in the physical infrastructure resulting from the ProGreSS Project, such as opening up densely wooded parts of the park and introducing a new play area [8].

Our impact is also evident in our work with stakeholders to influence practice and policy. The findings of the MRC-funded National Preventive Research Initiative [1, 5, 12] that both environment and engaging with communities at the individual level were identified as important drivers in behaviour change provided an important stimulus that led to the formation of the Healthy Public Policy Group [13]. This was a collection of key stakeholders from academia, local authority and the NHS to ensure that health and lifestyle were considered in local policy and action (e.g., proposed planning developments), and providing a sustainable mechanism for University researchers to influence local action. This group ran until 2013. The work of this group will now form a part of the new proposed Centre for Research and Action on Health Inequalities (CRAHI) a joint initiative between Staffordshire County Council, Stoke-on-Trent City Council, Staffordshire University and Keele University, due for launch in 2014. This new Centre will be based at Staffordshire University and over the next three years will administer a budget of ~£1 million provided by Staffordshire County Council and Stoke-on-Trent City Council. Continued work with the city council has culminated in the establishment of a Health Impact Assessment (HIA) Peer Review service within the Centre for Sport, Health and Exercise Research, whereby developers wishing to build in Stoke-on-Trent must submit an HIA, and we provide a quality assurance service [14]. Data from the MRC and MHM projects has also influenced policy, with data highlighting issues relating to health and urban planning in the city that stimulated the production of a supplementary planning document for Stoke-on-Trent City council [15].

Our expertise has also been recognised by involvement in a major project in which we continue to develop a social-ecology approach promoting healthy living with emphasis on environmental aspects and community engagement. We play a leading role in the PHENOTYPE research project: a four-year, €3.5 million, European project to explore links between the natural environment and health. It involves nine partner institutions and this unit is leading experimental work into psycho-physiological responses to different types of urban and natural environment, whilst making substantial contributions to community survey and epidemiological work. One work package is devoted to working with policymakers and other stakeholders to ensure that results develop European implementation guidelines for the design and management of the natural environment to maximise health benefit [16].

Our work has been covered in the media [8, 9]. We are also involved in a learning exchange initiative between communities in England and the USA. Under the REACH US / UK Communities

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for Health Learning Exchange Programme representatives from Stoke-on-Trent (inc. Gemma Hurst, Research Assistant on the MHM project) visited University of Alabama at Birmingham (UAB), and were hosted by the Minority Health Research Centre (MHRC) at UAB in November 2011 and March 2013. In June 2012, the US delegation made the return journey to Stoke-on-Trent. A partnership between Staffordshire University, Stoke-on-Trent City Council and University of Alabama at Birmingham has continued to develop with both institutions working with partners towards developing a sustainable smart cities / regeneration hub [17].

**5. Sources to corroborate the impact**

[8] For details on the Natural England Funded ProGreSS project, including the final report see: <http://www.staffs.ac.uk/research/csher/projects/progress/index.jsp>.

[9] For details on the My Health Matters Project, including the final report see: <http://www.staffs.ac.uk/research/csher/projects/mhmcc>

[10] Principal Manager Health Improvement - Social Determinants of Health; Stoke on Trent City Council.

[11] For details of the My Community Matters Scheme see: <http://mcmstoke.org.uk/>

[12] For Details on the MRC Project see: [http://www.staffs.ac.uk/schools/sciences/geography/links/IESR/projects\\_mrc.shtml](http://www.staffs.ac.uk/schools/sciences/geography/links/IESR/projects_mrc.shtml)

[13] Evidence for the Formation of the Healthy Public Policy Group [http://www.healthycities.org.uk/uploads/files/011\\_developing\\_healthy\\_public\\_policy\\_in\\_stoke\\_on\\_trent\\_stoke\\_on\\_trent.pdf](http://www.healthycities.org.uk/uploads/files/011_developing_healthy_public_policy_in_stoke_on_trent_stoke_on_trent.pdf).

[14] Information on our Health Impact Assessment Process can be found here: <http://www.staffs.ac.uk/research/csher/projects/hia/>

[15] Supplementary planning document for Stoke-on Trent City council based on MHM. <http://webapps.stoke.gov.uk/uploadedfiles/Hot%20Food%20Takeaway%20SPD.pdfent.pdf>

[16] For details on PHENOTYPE see: <http://www.phenotype.eu/> or <http://www.staffs.ac.uk/phenotype>

[17] For evidence of the learning exchange initiative see: <http://mhrc.dopm.uab.edu/resources/SymposiumProgramFull.pdf>.