

Lakes Estate 'Healthy Homes' Research Project

Aims and objectives

The Open University 'Healthy Homes' research project was commissioned in 2014 by the Public Health and Regeneration teams in Milton Keynes Council as part of the evaluation of the Lakes Estate refurbishment programme for council owned properties.

In previous regeneration work Milton Keynes Council residents reported health benefits alongside financial and other benefits, leading the public health and regeneration teams to commission research to capture the health and wellbeing impact of refurbishment of this scale more systematically. This was to be achieved by surveying households before the refurbishment works of phase two, and again after the works had been completed and experienced by residents for some months. The public health team also wanted to ascertain how public health services in the area were being used and what additional services might be needed.

The resulting 'Healthy Homes' research project is framed as a pilot project, establishing a possible blueprint for future evaluation research on housing regeneration.

Context

The Lakes Estate was built between 1968 and 1975. The properties are non traditional dwellings with very poor energy efficiency: in 2014 residents were spending on average £40 per week to heat their homes during the winter. In 2012 Milton Keynes Council implemented a programme for the refurbishment of approximately 400 houses on the Lakes Estate. The aim of the programme was to make targeted reductions in energy consumption and carbon emissions as well as reduce fuel bills for residents. This cost of the first phase of work to Milton Keynes Council was approximately £9.7m. It resulted in annual fuel bill savings of between 28% and 47%, with 47% being a saving of £544.

Methodology

The main research instrument was a semi-structured questionnaire, piloted in late March 2014. The OU research team developed the questionnaire by drawing on a range of health and wellbeing survey work, including the Warwick and Edinburgh Mental Health Wellbeing Survey (WEMWBS) and the New Economics Foundation (NEF) Consulting evaluation of Milton Keynes Neighbourhood Employment Partnership¹. Questions were also adapted from European wellbeing questionnaires and drew on the work of Dr. Waights and her team in the EU supported DISCOVER project.

The questionnaire was structured in six parts as follows:

- Baseline information (about length of residence, household size and employment status).

¹ <http://www.milton-keynes.gov.uk/housing/regenerationmk-prosperity>

- Views about your home and daily life (including details about their home's state of repair and about their living expenses)
- Your household's health (including specific conditions and perceived impact of housing on health)
- Wellbeing and the community (sense of wellbeing and connections to wider community)
- Views about services (current services used, needs for new services and how these should be delivered)
- Anything else? (open-ended section for any additional comments)

In all, 35 households took part in Stage 1 interviews before the beginning of June 2014. The residents' homes were representative of council properties on the estate, ranging from one bedroom bungalows to large family houses. The interviews accessed a range of residents in terms of age and employment status. In all but one household, one or more adults over 25 presented for the interview; in the remaining household a young adult under 25 years was present. Children, either infants or school-age children or both, were present in 49% of the households interviewed.

Stage 2 of the research compared the views of twenty Lakes Estate households in 2014, before renovation work had started, with their post-renovation responses in December 2015, nine months after work on the final homes had been completed. While only 20 of the original 35 households could take part in Stage 2 the sample remained broad, included working age families, with and without dependent children, and families receiving state benefits, including retirement, disability and unemployment-related payments.

Findings

The Stage 1 research found that people were 'finding a significant degree of difficulty in getting by' and were perhaps responding by 'hunkering down'. There is some evidence from the Stage 2 results that the renovation has had a positive impact on people's wider health and wellbeing.

(a) Material Conditions

Households were asked for their views about their homes in terms of size, layout, location and maintenance: the majority of households were very or fairly happy with most features of their homes.

However, there was a much more varied response to questions about heating costs, with only 40% being very or fairly happy with the costs of heating and staying warm in their home. 17% of households were unhappy or very unhappy with the amount of outside space they had. Noise levels also caused some concern, with only 54% very or fairly happy with the noise levels and 22% unhappy or very unhappy with this aspect. In addition, only 40% were very or fairly happy with the Council's maintenance of their property, compared with 28% who were unhappy or very unhappy.

Households reported on the most liked and disliked features of their homes. Almost all mentioned the damp as their most disliked feature with comments such as '*there is mould everywhere*' and '*our bedroom grows mushrooms; I have to scrub mildew off the window area near the curtains*'. Others mentioned the impact of the flat roof:

'summer – ridiculously hot' and *'it looks like a cardboard box, very hot in summer'*. Concern was also expressed, especially by older people, about noise and anti-social behaviour.

Households were questioned about the physical state of their homes, asking them to report on a range of features such as damp, rot, leaks and cracks. Properties in general were reported as being in a poor physical state and there was a high level of concern in households about the state of their properties preceding renovation. For example, condensation was reported by 80% of households interviewed, mould by 74%, cracks by 60% and rot and damp by 51%. Properties were also seen as poorly insulated, with well over half of households suffering from excessive cold and 40% from excessive heat. 31% complained of pipe leaks and 11% reported fumes or fuel leaks.

In Stage 2, Households were again asked for their views about their home in terms of its size, aspect, comfort, noise, location and maintenance. Responses about size, location and aspect were similar to the Stage 1 responses, suggesting that the renovation did not alter people's views about these aspects. However, householders' views had shifted significantly in relation to noise and comfort. 75% of households in the 2015 group were 'very or fairly happy' with the noise level, compared to 60% in the same group in 2014.

In the Stage 2 interviews only one respondent still had a major damp problem and this reflected the fact that the house had been empty for over five years. This reflects the changed responses to the question about 'problems for you in your home'. Several households mentioned excessive cold in certain rooms (35%, n=7), residual mould (30%, n=6) and condensation on windows (25%, n=5) but almost all said that these problems were much less acute than before. They clearly did not figure enough to be seen as 'most disliked' features any more.

(b) Financial Pressures

To try and ascertain financial pressures on households interviewees were asked two questions about costs of daily living. In Stage 1 48% had worried about fuel costs often or always; 40% about food costs; and 31% about housing costs in this period. Older people living alone and lone parents with young children appeared worst affected. The other striking shift was in perceptions of the quality of Council maintenance. In stage 1 only 30% (n=6) were 'very or fairly happy' with the Council's maintenance of their property, compared with 55% (n=11) in the stage 2 interviews.

In the Stage 2 interviews, however, their responses had changed somewhat. Only 20% (n=4) worried 'often' or 'always' about food costs, 40% (n=8) about fuel costs and 25% (n=5) about housing costs. Most households reported that gas bills were now lower: the renovation *'halved gas bills'* (household 1), *'yearly statement from gas company: gone down by two-thirds since roof was done, hardly put heating on and it stays warm'* (household 7). This might suggest that for many households the lower gas bills had released a little more money to use to meet food and rent costs.

Some households continued to worry about bills and report that their fuel bills were still high. Household 5, for example, reported that fuel bills were *'still the same'* and

household 20 had the 'same level' of worry about fuel and housing costs and more worries about food. The pattern, although the sample is too small to be confident, was that younger families tended to worry more about food, fuel and housing costs while retired couples had noted fuel savings and now worried less about heating costs in particular.

(c) Health and Housing

Households were asked about aspects of their health and about their perceptions of the impact of their housing on their health. In Stage 1 of the research, 26% rated themselves as in good health all of the time and 29% rated their household as often in good health, compared with 28% who rated their household as rarely or never in good health. They were also asked about aspects of poor health and breathing problems and persistent bad coughs were reported in 57% and 40% of the households respectively. In 60% of households a member reported problems with sleeping and aching joints were reported in 69% of households. In 45% of households a member reported feeling low or depressed.

Households were asked specifically about long-term health conditions and bronchitis was reported in 37% of households, other lung disease in 34% and heart disease in 23%. There was at least one smoker in 60% of the households interviewed. The most frequently mentioned 'other lung disease' was asthma, with four adults and six children being reported as currently experiencing this condition. In addition, three children were reported as having suffered asthma in previous years: *'my daughter was constantly wheezing at 6; I had to take her out of school often'*.

Household members were asked to assess whether any aspects of their housing had an impact on their household's health. People made links between their housing and their health in 43% of households. All householders associated asthma with the persistent damp and mould in their homes, seeing this not necessarily as the cause but as an exacerbator: *'not the cause but it doesn't help'*. Several households made links between bouts of bronchitis, persistent coughs and colds and their defective housing. *'My daughter had bronchitis when living here; it cleared up when she left'*. In some households 'stress' and 'noise' were reported as impacting on people's health and the general dampness and cold in bedrooms was seen as resulting in sleeping badly and subsequent tiredness.

In Stage 2 of the research, 40% of households reported that overall the renovation work had a positive impact on their health. Many tenants, especially older people, reported feeling warmer, more comfortable and more able to use all parts of their home. Their feelings of wellbeing increased even if they did not see the renovation as having a measurable positive impact on their particular health condition. In several cases households with adults or children who suffered from asthma reported that their condition had improved and older people noted the absence of colds and the positive impact on their health of greater mobility.

(d) Community Wellbeing

Households were invited to rate a series of statements about their collective outlook on a five point scale ranging from 'none of the time' to 'all of the time'. These questions were drawn or adapted from the NEF evaluation of Milton Keynes

Neighbourhood Employment Programme and thus offer a high degree of comparability with that research in terms of approach.

Of note in the Stage 1 research is the cautious optimism that households has about the future, with 60% of households feeling optimistic some, most or all of the time. This was reflected in other responses from households including 63% reporting feeling 'full of life and with energy to spare' and 97% feeling 'cheerful and happy' as a household. It aligns to some extent with responses to the statement: 'Taking all things together, we find it difficult to deal with important problems that come up in our lives' since for 54% that statement held true none of the time or rarely. On the other hand, there were significant numbers of households stating that energy, cheerfulness and the ability to deal with important problems are absent, lacking or only intermittently possible. For example, feeling 'full of life and with energy to spare' is not experienced at all by 14% of households and experienced only rarely by 23%. If households experiencing these feelings only some of the time are added together, 54% in total report more negative feelings.

Households reported feelings of connectedness to their neighbours. When asked whether they felt isolated from people in their street 74% replied 'none of the time' or 'rarely', with only 14% feeling isolated often or all of the time. Aligned to this, the majority of households felt that they generally received help from other people when they needed it, with 29% reporting this often being the case and 20% reporting that it happened all of the time. Only 8% of households reported that they could count on no help from other people. However, many respondents reported that this help came from family and friends not necessarily living on the estate.

Compared with the pre-renovation results, in Stage 2 35% more households reported receiving 'help from other people when we need it' and 25% more households reported feeling 'cheerful and happy', and 'interested in other people' 'most' or 'all' of the time. 35 per cent fewer households reported feeling 'isolated from most people in our street'. However, this did not translate into a greater interest in being involved in their local community via organisations or activities. Households valued local services but appeared to pick and choose those that suited them rather than having a sense of local loyalty.

There was some evidence that people valued preventive services and requested local facilities such as exercise classes. Health facilities – GP, hospital, walk-in centre – were the most favoured locations for new services and face-to-face services delivered by a public health practitioner or health visitor was also welcomed. People were increasingly willing to receive information about services through the web, email or text although direct delivery remained the most popular choice.

Reflections on the findings

The main shared concern of households in Stage 1 was the state of their own home and, in particular the condensation, damp, rot, mould, poorly fitting windows and doors and extremes of temperature in winter and summer if there was a flat roof. Nearly half of households (43%) made links between their housing and their families' health and several other households mentioned past examples of coughs and other chest conditions, even if they did not see these as directly linked to their housing. Stage 2 results indicate that renovation has had a positive impact on people's health,

and in several cases households with adults or children who suffered from asthma reported that their condition had improved and older people noted the absence of colds and the positive impact on their health of greater mobility.

While there was little evidence of desperation, Stage 1 results showed the majority of households found it difficult to manage and several reported that this was getting harder. Nearly half worried often or always about fuel costs and food costs. There was an expectation in most households that the renovation would ease their financial pressures by reducing fuel and heating costs. Stage 2 results found that households were worrying less about their bills at that time, especially their gas bill but also food, electricity and rent.

Several households identified the potential of some wider 'health and wellbeing' services such as sessions to bring older people together. Some suggestions for other provision were made by younger mothers, such as a local, inexpensive gym or exercise class. Several householders viewed the infrequent and inconvenient public transport system as being a barrier to accessing such amenities further afield.

The responses at Stage 1 relating to people's health and connectedness to the wider community suggested that this was an estate in which most households were experiencing a significant degree of difficulty in getting by and many of them have health problems, some of which were related to their housing. Households were responding by 'hunkering down' and engaging relatively little with the wider community, which might have increased their sense of isolation and, potentially, evoked feelings of alienation or depression. At Stage 2, in relation to the statement 'we generally receive help from other people when we need it', 55% (n=11) responded 'all of the time' whereas in stage 1 only 20% (n=4) had done so. In response to the statement: 'as a household we feel isolated from most people in our street', 70% chose the category 'none of the time' whereas in stage 1 only 35% (n=7) had done so. There is some tantalising evidence from the Stage 2 results that the renovation has had a positive impact on people's wider health and wellbeing.

Only 35 households could be interviewed in the first formal stage 1 process (although more interviews have now taken place), and only 20 were able to be interviewed for stage 2. However the fact that the whole household could be included was a real advantage. In many, though not all cases, this meant that the views of several household members could be recorded and that a response was preceded by discussion and the creation of a consensus on what the household answer should be.

Next steps

It proved challenging to create a 'cohort' for stage 1, in the sense of concentrating only on households whose homes were in the first, spring wave of renovation. In fact, the research team worked with households whose properties were due for renovation at any time between spring and autumn 2014 in order to create an adequately sized sample. Stage 3 research will involve integrating findings from this study with those from a parallel study being conducted by the National Energy Foundation (NEF) using energy monitoring equipment in 8 households. The resulting final report due in 2016 will provide Milton Keynes Council with evidence on the

health and well-being impacts of refurbishment works, and of the potential for engaging local people in future studies of this kind.

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