

Impact case study (REF3b)

Institution:	University of Ulster
Unit of Assessment:	4
Title of case study: The human impacts of fuel poverty – assisting those most in need.	
1. Summary of the impact	
<p>The UK has some of the highest levels of fuel poverty worldwide, with Northern Ireland being worst affected (Liddell, 2012). As a psychologist, Professor Liddell has helped transform the issue of fuel poverty from one concerned with housing to one that focuses on <i>human impacts</i>. Her research led to a greater focus on infants and children living in fuel poverty, a group hitherto largely excluded from the literature. She was also the first to analyse the mental health benefits of tackling fuel poverty, which are now integral to the rationale of all the UK's regional fuel poverty strategies. Finally, new methods for targeting resources to those in most need have been implemented as a direct result of her research on area-based tools.</p>	
2. Underpinning research	
<p>Fuel poverty occurs when a household cannot afford to heat their home to the standard which the World Health Organization (WHO) considers safe for human wellbeing. WHO set this standard in 1984, because it had become evident that cold homes were associated with significant <i>physical</i> health risks among adults who were prone to cardiovascular and respiratory illnesses.</p> <p>In 2008, Christine Liddell was commissioned by Save The Children (STC) to investigate impacts of fuel poverty among children. Her report was the first to emphasise the additional risks that cold homes create for infants and children, and to highlight the extent to which risks for this group could generate a cycle of cumulative health deficit across the lifespan (Liddell, 2008). This work also documented the extent to which governments' fuel poverty strategy - in GB, Northern Ireland and Ireland – had neglected young people in the development and implementation of their action plans around cold homes.</p> <p>This research was also able to demonstrate how targeting resources towards young people might generate long-term health <i>benefits</i> and therefore long-term health <i>savings</i> for government. This was made explicit in a cost-benefit analysis which the Department for Social Development Northern Ireland (DSDNI) commissioned her to undertake that same year (Liddell, 2008). Later, Liddell became part of a team funded by the Department of Energy and Climate Change (DECC) which undertook a confidential cost-benefit analysis of tackling fuel poverty in England. (http://www.shu.ac.uk/research/cresr/ouexpertise/monetising-health-benefits-energy-efficiency-programmes).</p> <p>Soon after publication of the STC report, a grant from Northern Ireland Chest Heart and Stroke charity facilitated her in-depth research into excess winter mortality, which ultimately led to an invitation from the Surgeon General NI to contribute a chapter to his annual report (Morris & Liddell, 2011)</p> <p>In a 2010 paper, Liddell's team widened their scope, highlighting the wide variety of links between fuel poverty and mental wellbeing, concluding that the evidence base for risks to <i>mental</i> health was even more compelling than the evidence base linking fuel poverty with physical health risks (Liddell & Morris, 2010). Impacts on mental health are now noted as underpinning rationales for Fuel Poverty Strategies in all 4 regions of the UK.</p> <p>As a result of growing austerity measures, there has been increasing interest at government level in targeting resources towards people most in need. Liddell's research played a pivotal role in developing new area-based targeting tools through which people in the most extreme forms of fuel poverty could be identified in Northern Ireland, a group hitherto labelled "<i>hard to reach</i>". The area-based approach was first outlined in the team's independent review of fuel poverty (Liddell, Morris, McKenzie & Rae, 2011). It was then further developed through metric analysis (Liddell, Morris, McKenzie & Rae, 2012), before being evaluated in the field, in partnership with 18 District Councils (Walker, McKenzie, Liddell & Morris, 2012).</p>	

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As well as developing new targeting tools, the team also analysed the targeting efficacy of previous approaches to tackling fuel poverty, using this analysis to point towards improved implementation and practice (Walker, Liddell, McKenzie & Morris, 2013). This research led to DSDNI inviting all 26 Councils in Northern Ireland to augment their traditional approaches to tackling fuel poverty by using the new methods outlined in the paper (see Appendix 1).

3. References to the research

Liddell, C. (2012) Fuel Poverty Comes of Age: Commemorating 21 Years of Research and Policy. *Energy Policy*, 49, 2-5.

* Liddell, C. & Morris, C. (2010) Fuel poverty and human health: a review of recent evidence. *Energy Policy*, 38, 2987-2997.

Liddell, C. Morris, C. McKenzie, SJP & Rae, G. (2012). Measuring and monitoring fuel poverty in the UK: National and regional perspectives. *Energy Policy*, 49, 27-32.

Morris, C. & Liddell, C. (2011) Seasonality of mortality in Northern Ireland. Annual Report of the Surgeon General. Belfast: Northern Ireland Statistics and Research Agency. (Invited report).

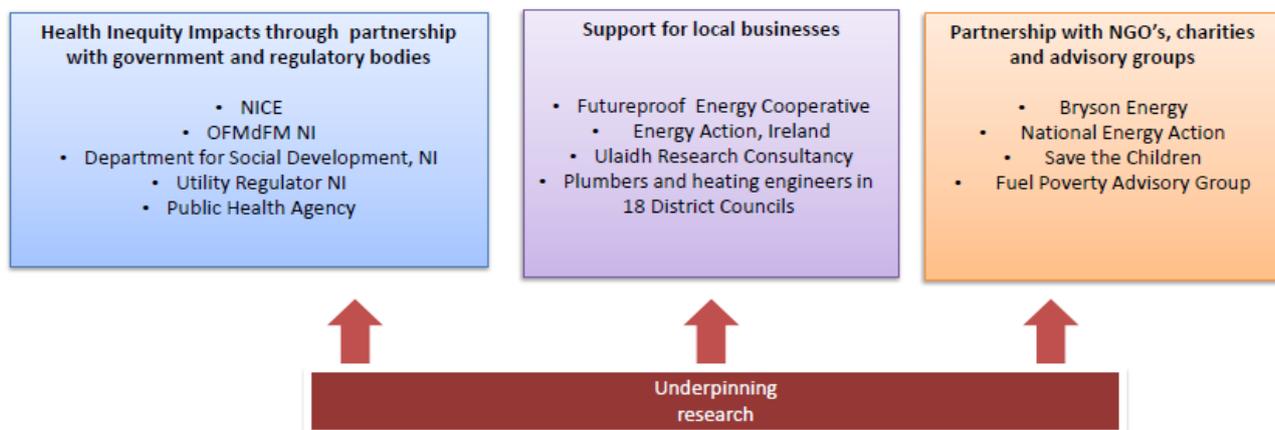
* Walker, R. McKenzie, SJP. Liddell, C. & Morris, C. (2012) Area-based targeting of fuel poverty in Northern Ireland: An evidenced-based approach. *Applied Geography*, 34, 639-649.

* Walker, R. Liddell, C. McKenzie, SJP. & Morris, C. (2013) Targeting fuel poverty programmes to those most in need: an evidence-based analysis of Northern Ireland's Fuel Poverty Strategy 2001-2012. *Energy Policy*, 63, 765-774.

* Three top references.

4. Details of the impact (indicative maximum 750 words)

Figure 1: Areas of impact



4.1. Health inequity impacts through partnerships with Government & Regulatory Bodies

“My Department has responsibility for energy efficiency in the home, the DHHSP has responsibility for health-related issues — a significant report was carried out by Dr Liddell into the matter.”

(Minister Margaret Ritchie, DSDNI, 2008)

<http://www.theyworkforyou.com/ni/?id=2008-11-10.8.31&s=Liddell+fuel+poverty+Ritchie#g8.35>

“I have found the evidence presented by Professor Liddell in this area very compelling.”

(Minister Nelson McCausland, DSDNI 2009).

http://www.dsdni.gov.uk/index/publications/ministers_speeches/ministers-speech-nea-conference.htm

Commissioned by Department for Social Development (DSDNI) to make recommendations for strategy. Key recommendations subsequently adopted into NI's Fuel Poverty Strategy 2011:

- A stronger focus on the *wellbeing benefits* associated with tackling fuel poverty
- A title for the Strategy which emphasises health (*Warmer Healthier Homes*);

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- Tackling but *also* preventing fuel poverty
- Targeting those most in need first:

“Professor Liddell has been working with the Department intensively to bring in a sound evidence-based approach, and this says that we need to identify those in greatest levels of fuel poverty... We have to deal with those who have the greatest problems, and her work is focused on that.”

(Minister Nelson McCausland, DSDNI in Hansard 2013)

<http://www.niassembly.gov.uk/Documents/Official-Reports/Plenary/2013-14/Monday9SeptemberREVISED.pdf>

Commissioned by DSDNI Committee to assist in the development of a new Ministerial Cross-Sectoral Advisory Group on Fuel Poverty. Launched at Stormont in autumn 2011, Liddell was the sole Keynote speaker (see Appendix 2). Coupled with previously mentioned support from Minister Ritchie (SDLP party), and Minister McCausland (DUP party), this additional support from the DSD Committee which is led by Alex Maskey (Sinn Féin) means that the research has garnered evidence-based cross-party support in Northern Ireland’s Legislative Assembly.

Core expert on Excess Winter Deaths for NICE

<http://www.nice.org.uk/nicemedia/live/13899/64780/64780.pdf>

Commissioned by Public Health Agency NI to write their *Cold Weather Good Practice Guide*

http://www.publichealth.hscni.net/sites/default/files/Guide%207%20Combating%20Cold_0.pdf

Liddell’s cost-benefit analysis cited 228 times (e.g. Chief Medical Officer (England), the Northern Ireland Parliamentary Assembly, and NICE).

Number of families assisted by DSDNI has increased by 50% since Save The Children report (NIHE, 2001 to 2011 House Condition Surveys).

Number of “false positives” in Warm Homes installations reduced by three quarters

<http://www.ofmdfmi.gov.uk/tackling-fuel-poverty-in-ni-liddell-lagdon.pdf>

“The university evaluation of the pilot estimates that one in two of households contacted proved to be eligible for assistance from the warm homes scheme. A lot of the work was done in cooperation with Professor Liddell, and it directed us to area-based work, which seems to be much more productive in comparison with how things were being done. From the initial positive results, we have moved to phase 2, which is to test that energy-efficiency measures can be delivered.

(Minister Nelson McCausland, DSDNI, in Hansard, 2013)

<http://www.niassembly.gov.uk/Documents/Official-Reports/Plenary/2013-14/Tuesday22October%20REVISED.pdf>

Developed NI’s *Code of Practice for Smart Meter Installers*, and the training package associated with it.

Commissioned by the Utility Regulator to lead the region’s first smart meter trial.

“The findings of her research were significantly important, especially when considering future interventions and care for those living in fuel poverty. She collaborated with suppliers, meter manufacturers and my team to ensure everything was compliant.”

(Tom Doran, Learning and Development Manager, Northern Ireland Electricity)

4.2. Support for local businesses

Capacity-building sub-contracts for local energy agencies (£60,000) have been generated in the past 2 years (see Figure 1 for sub-contractor list).

Through partnership with DSDNI and 16 Councils, local plumbers, heating engineers and boiler installers have worked in **1,500 homes of people in extreme fuel poverty, installing efficiency measures to the value of £400,000** in the first Phase of the project’s rollout.

“The findings of the various projects she has worked on fed directly into the Division business plan and the 2011 Fuel Poverty Strategy”.

(Eilish O’Neill, Housing Development Manager, DSDNI)

4.3. Partnerships with NGO's, charities and advisory groups

Bryson Energy (Northern Ireland's largest social enterprise) and Liddell currently work on 5 projects, commissioned by the Oak Foundation through a £1M grant:

"Professor Liddell has greatly assisted Bryson Energy...she has trained our staff in professional report-writing and research. As well as building confidence amongst staff, the training has resulted in significant successes in tender applications. She has also assisted us in the development of materials for use by the general public around areas such as brokering, health and retrofit."

(Nigel Brady, Director Bryson Energy)

Three projects completed in collaboration with National Energy Action NI, the region's largest fuel poverty charity:

"Her experience of real world issues brings a sense of reality to her content, and her contribution is also inspirational leading to debate, participant engagement, and change."

(Paul Wallace, Development Manager, NEA NI)

Served on the Fuel Poverty Advisory Group NI since 2008

"I was pleased that the Department provided funding for the research carried out through Professor Christine Liddell. I strongly recommend that readers refer to the summary document of this work. I have no doubt that its content will be exercising the collective minds of the FPAG as we approach another winter."

(Chair, Northern Ireland Fuel Poverty Advisory Group, in FPAG Annual Report, 2011).

Reviewing the overall impact of her work in 2013, the former Chief Executive of the Office for the Regulation of Electricity and Gas in Northern Ireland, Douglas McIlldoon, commented:

"Christine has been a much availed of resource to the entire fuel poverty community – from non-governmental organisations to Ministers and their advisers. She is much more than a rigorously objective academic researcher – though she is that as well. She has a real world engagement with her subject matter. Her work is practical and focussed on finding and testing solutions to problems. Christine clearly believes sound policies are more likely to follow if evidence produced by research is widely disseminated, thoroughly understood, and properly debated at every level and by all stakeholders. Northern Ireland is fortunate in having an academic researcher who combines the highest standard of research and analysis with a strong commitment to the public good".

5. Sources to corroborate the impact

1. Hansard and other Parliamentary Assembly sources

<http://www.niassembly.gov.uk/Assembly-Business/Committees/Social-Development/Committee-Consultations/Fuel-Poverty/Letter-from-Department-for-Social-Development-dated-25082011/>

<http://www.niassembly.gov.uk/Assembly-Business/Committees/Social-Development/Reports/Report-on-Fuel-Poverty/>

http://www.niassembly.gov.uk/Documents/Answer-Book/2011/111104_revised.pdf (page WA 306)

http://www.niassembly.gov.uk/Documents/Reports/Social%20Development/NIA_36_11_15.pdf

<http://www.niassembly.gov.uk/Documents/Answer-Book/2012/120622r.pdf>

<http://www.niassembly.gov.uk/researchandlibrary/2009/8909.pdf>

2. Others

http://www.scottish.parliament.uk/S4_FinanceCommittee/Existing_Homes_Alliance_Scotland.pdf

http://www.dsdni.gov.uk/index/publications/ministers_speeches/ministers-speech-defining-fuel-poverty.htm

http://www.scottish.parliament.uk/S4_EconomyEnergyandTourismCommittee/Inquiries/Energy_Action_Scotland.pdf

- Letter from the Learning and Development Manager, Northern Ireland Electricity Ltd
- Letter from the Manager of the Housing Division, Department for Social Development
- Letter from the Director of Bryson Energy
- Letter from Chief Executive of the Office for the Regulation of electricity and Gas in Northern Ireland (2003-2005)
- Letter from the General Manager of Energy Action Limited