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Neoliberalism and Fuel Poverty in Pre-Covid Times: Technocentrism, the Depoliticising of Care and Lessons for a Post-Covid UK

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Abstract

In pre-Covid times, the British government made the elimination of fuel poverty a central tenet of its energy policy. Yet, fuel poverty remains a crucial area of concern for both policymakers and the British public especially given the hardships experienced by those in relative poverty over the Covid lockdowns and the current post-Covid 'cost of living' crisis (Rawlinson, 2022). In an effort to explore why these past practices aimed at ending fuel poverty fell short and might provide some lessons for a post-Covid UK, this paper seeks to examine how an increasingly technocentric view of fuel poverty and its drivers may be seen as limiting the effectiveness of policy. Building on an increasing body of work focusing increasingly on the importance of the "lived experience" of fuel poverty and energy vulnerability, this paper examines how traditional indicators fail to adequately address what Middlemiss and Gillard (2015) term the complex and dynamic nature of people's relationship with energy. Using an ethnographic approach, this paper seeks to highlight real world examples of how a technocentric definition of fuel poverty is falling short and not having the desired impact. We examine how methodologies aimed at quantifying diverse measures of well-being discount the lived experience of poverty and ignore the diverse set of factors that produce and reinforce it. We examine issues regarding the compatibility of the responsibilisation and subjectification of the fuel poor with their relative position of vulnerability and disconnection, and how their lack of mobility, both real and perceived, may limit their ability to act as rational agents as intended by neoliberal forms of policy. Here we show how this neoliberalisation and technocentrism of 'solving' the fuel poverty crisis works to depoliticise societal care towards some of its most vulnerable members in the UK.

Keywords

Fuel Poverty, Energy Vulnerability, Neoliberalism, Technocentrism, Lived Experience of Poverty, Responsibilisation, Ethnography, Depoliticisation of Care

Introduction

In pre-Covid times, the British government has made the elimination of fuel poverty a central tenet of its energy policy. Beginning with the adoption of the Warm Homes and Energy Conservation Act 2000, and the subsequent publication of the UK Fuel Poverty Strategy in 2001, a framework was set out to ensure that no one lived in fuel poverty by the year 2016. This has been followed up by a range of schemes such as the Warm Front, Carbon Emissions Reduction Target (CERT), Community Energy Saving Programme (CESP), and most recently, the Energy Company Obligations (ECO), which is a key policy for tackling fuel poverty within the UK. Yet, fuel poverty remains a crucial area of concern for both policymakers and the British public especially given the hardships experienced by those in relative poverty over the Covid lockdowns and the current post-Covid 'cost of living' crisis (Rawlinson, 2022). An ONS (2016) statistics report stated that one person dies every seven minutes as a result of the cold or cold related illnesses, and that almost 120,000 deaths were reported through the four winters from 2013-2016. This made cold a bigger killer across the UK than road accidents, and drug or alcohol abuse combined. Despite this, the figures published by the Department for Business, Energy, and Industrial Strategy (DBEIS), show that between 2012 and 2016, the percentage of people suffering from fuel poverty experienced minimal change and while the average fuel poverty gap did fall marginally, the margin by which it decreased was inconsequential in both policy and real terms.

As Middlemiss and Gillard (2015) note, efforts to tackle fuel poverty to date within a UK context may be characterised by a tendency to view fuel poverty as a technical issue measurable by macro-level indicators such as the aforementioned fuel poverty gap, and primarily influenced by factors such as energy prices, energy efficiency and income. In an effort to explore why these past practices aimed at ending fuel poverty fell short and might provide some lessons for a post-Covid UK, this paper seeks to examine how an increasingly technocentric view of fuel poverty and its drivers may be seen as limiting the effectiveness of policy. Building on a body of work focused increasingly on the importance of the "lived experience" of fuel poverty and energy vulnerability (Middlemiss, 2016; Middlemiss and Gillard, 2015, Bouzarovski et al., 2013; Price et al., 2012; Mould and Baker, 2017), this paper examines how traditional indicators fail to adequately address what Middlemiss and Gillard (2015, p.1) refer to as the complex and dynamic nature of people's relationship with energy.

Using an ethnographic approach advocated for by authors working on relational geographies of poverty (Rignall and Atia, 2017; Elwood et al., 2016), this paper seeks to highlight real world examples of how a technocentric definition of fuel poverty is falling short and not having the desired impact. We seek to examine how methodologies aimed at quantifying diverse measures of well-being (Rignall and Atia, 2017, p.4) discount the lived experience of poverty and ignore the diverse set of factors that produce and reinforce it (Reddy and Pogge, 2009; Wisor, 2012). We examine issues regarding the compatibility of the responsibilisation and subjectification of the fuel poor with their relative position of vulnerability and disconnection, and how their lack of mobility, both real and perceived, may limit their ability to act as rational agents as intended by neoliberal forms of policy.

Background

Before going into greater depth, it is necessary to provide a brief background on efforts to tackle fuel poverty within the UK, including the change in how fuel poverty is measured, and the continuing depoliticisation of the issue.

From 10% to the LIHC

Based on recommendations from the Hills report (Hills, 2012), the British government changed the way fuel poverty is defined from a household spending 10% of its income on energy to one which has fuel costs above the national median level and who were they to spend that amount, would be left with a residual income below the official poverty line. This has significant implications as failure to properly comprehend the construction of a problem is likely to severely hinder attempts to combat it. This is key as recognition of the diverse rights of different groups is fundamental to environmental justice (Fraser 1997; Honneth 2001; Schlosberg, 2007; Walker, 2009) along with understanding of distributional impacts and the right to participation (Hunold and Young 1998).

The 10% indicator was a remarkably simplistic definition and it is fairly obvious to see why at a basic level this was problematic. The fact that it was a ratio essentially meant that no matter how rich you were and how much disposable income you had, you could still be classified as fuel poor, whereas those on low incomes spending just below the 10% threshold would not make the cut despite having a significantly lower disposable income as a result of fuel spending. Not only this, but changing fuel prices caused extreme fluctuations with a £10 increase in fuel bills being equivalent to a £100 rise in come. This was in addition to the fact that fuel poverty as calculated by the government was frequently at a large discrepancy to that perceived by the public with self reported fuel poverty rising from 6.4% to 7.7% during the years 2004-2007 whereas under the governments definition, it rose from 5.9 to 13.2% (Hills, 2012)

As a result of this, starting in 2013 and up until the Covid pandemic, an effort was made to determine a new indicator for fuel poverty to allow for more appropriate targeting of needy families and homes in addition to painting a more accurate picture as to the extent of the problem. To avoid the pitfalls of the previous definitions, the new indicator was designed to be increasingly flexible focusing on properties with a combination of low incomes and high costs. It deals with income after housing costs by stating that anyone spending more than the UK median on energy bills who is below the poverty line as a result is classified as fuel poor. It also raises the issue of the poverty gap introducing the notion of how much higher income would need to be to no longer be fuel poor. The new definition raises new issues however. While it also has inclusivity issues with some houses who spend heavily on energy being discounted for being just above the poverty line, the two biggest issues it faces are that a) it can be seen as a tacit agreement that fuel poverty is incurable and can never be totally eliminated and b) that fuel poverty is fundamentally an issue of technological efficiency (Middlemiss, 2016). This has major implications.

The depoliticising of fuel poverty: how and why?

Through this pre-Covid framing of fuel poverty as an issue that is impossible to eradicate in addition to one that is fundamentally technological, this marks a clear change in politics from previous conceptions of fuel poverty as a problem which was to be beaten once and for all. Furthermore, it marks a fundamental shift towards a notion of fuel poverty in which participation and issues surrounding recognition and vulnerability are pushed out in favour of a unified theory of fuel poverty as directly attributable to the energy efficiency of one's property with other economic and structural factors being heavily discounted. This increasing depoliticisation of the issue of fuel poverty removes questions around who should care, and for whom we should care for, instead framing the individual as a passive recipient of state aid. While the original definition was clearly problematic, the benefits of the previous definition were twofold in that it arguably took into account the impact of behaviour of fuel poverty and most importantly, it took into account structural factors such as the cost of energy and wages (although it was arguably over-sensitive to rising or falling energy prices).

With the new definition however and the inclusion of median spend coupled with the fact that you must now be under the poverty line, this means that energy prices or wage levels now have far less impact on whether someone is in fuel poverty. In addition to this, under the new definition of fuel poverty, the government has slashed the number of people in fuel poverty by approximately half (Middlemiss, 2016) through eliminating, for example, houses with low income but also low costs and houses with high costs but higher incomes.

It is vital to note that despite the fact that this change of definition serves to depoliticise the issue of fuel poverty, the decision itself to change the definition is inherently political given the implications for the distribution of wealth. As some people are now classed as fuel poor, they may seek assistance whereas others who might genuinely be struggling who were previously classed as fuel poor might just miss out as highlighted by the fact that approximately half of the homes in fuel poverty exited fuel poverty as a result of this change.

The consequences of this is that there are inevitably winners and losers and as Middlemiss (2016) points out, increasingly basing fuel poverty around technical efficiency portrays fuel poverty as an issue which is inherently unsolvable, instead framing it as some form of social constant requiring massive amounts of money to overcome. Under the maxim of austerity, this may provide a justification of sorts for ignoring the issue as being too costly or impossible to fix while disregarding the very real human cost of inaction. Furthermore, it saves having to confront the reality that the current economic system might be at its core unequal and that deeper social and political issues might need to be addressed.

This is summed up by Greg Davey (previous secretary of state for energy) who said in 2013, "with upwards pressure on energy bills caused by rising global energy prices and the diversity of our housing stock, our work also makes it clear that fuel poverty is a challenge of both scale and complexity. It is not a problem that can be eradicated in any meaningful way, certainly not by 2016, and not in any short time horizon. The reality of the current economic situation is that there are only limited resources to tackle the problem. So we need to use those resources effectively".

Methodology

The approach taken for this paper was one which aimed at exploring the lived experience of a small set of households coping with fuel poverty, with the goal of analysing how the experience of these individuals was compatible with the current set of fuel poverty policies within the United Kingdom, and what issues arose from a more technical framing of the problem. As such, this research uses an oral history approach such as the one elaborated on by Goodchild et al. (2017, p.1) with the goal of "revealing previously undocumented phenomena in the private world of the home" and drawing on real world examples to avoid future mistakes, or what Janda and Topouzi (2015) term "learning stories." This approach "foregrounds explicitly the ontology of personal experiences" (Goodchild et al., 2017, p.1) and allows the researcher to consider why stories were recounted in a particular way (Kohler-Riessman, 2000).

The research consisted of six in-depth interviews in 2015: five with unique households, all suffering from fuel poverty, either technically defined, or self identified; and another with the head of a local organisation named Draughtbusters working to combat fuel poverty within a specific region of the United Kingdom through the offering of free draughtproofing, basic energy efficiency measures and tailored advice. These interviews lasted for an average of one to two hours, and were focused around the households experience of living in fuel poverty, the perceived causes and effects of their situation, and their experience of policies aimed at lifting individuals out of fuel poverty. While the number of interviews is limited, and thus these results should not be seen as statistically significant or necessarily representative of larger demographics, they serve to highlight in very clear terms how current attempts at tackling fuel poverty may not work as intended by showing specific real world examples of the potential pitfalls of a more technocentric approach to tackling the issue and how this can increase exclusion and disconnection.

Given the sensitive nature of the issue of fuel poverty, and the vulnerable status of many suffering from it, gaining access to the interviews required was not a simple process. Initially, the local council introduced us to the head of a local organisation working with fuel poverty in the surrounding area, and through this, several interviews were arranged with people who had been the recipient of help from this organisation. In addition to this, further interviews were arranged with volunteers who were recruited through a request for households suffering from fuel poverty made to professional contacts. Given that the local organisation was in the position of being able to evaluate recipients on a more personal and case by case basis, and therefore not beholden to the LIHC indicator, it is possible that interviewees do not classify under the official government definition, however all participants in this study identified themselves as struggling to heat their homes sufficiently while paying other bills and expenses. It is also important to note that efforts were made wherever possible to interview households with a range of profiles such as families, single individuals, and young house-sharers.

Semi-structured interviews were recorded and transcribed before thematic analysis was carried out. This was based around a predominantly exploratory approach (Guest et al., 2012) rather than being hypothesis driven, searching for specific codes and analytic categories which were not predetermined. As noted, the key goal was to find specific examples of how current policies and approaches aimed at tackling fuel poverty were either succeeding or failing during this pre-Covid time period. Given this, examples found in the text were noted down, and an attempt was made to evaluate how these examples could fit into certain categories of interest such as an ethics of care and responsibility under neoliberalism, focusing on how care is being reconstructed and how the responsibility of caring is being shifted away from the government; self perception and subject formation, focusing on how individuals view themselves relative to their situation and whether or not they see themselves in a position of power or as passive recipients of aid; and governance/governmentality, focusing on how governments are depoliticising issues using an increasingly managerialist approach. As agreed upon before data collection, all names have been changed to protect the anonymity of respondents.

Results and Discussion

From the data, it was clear that in the cases studied for this paper, respondents felt as if efforts to lift them out of fuel poverty were often insufficient or misconstrued. Several key themes arose regarding issues with the shift to a more technocentric problematisation of fuel poverty. These include the fact that behaviour was a far more significant driver of fuel poverty than the current definition supposes (and as such, capital investment was no guarantee of lifting a household out of fuel poverty); that for the majority of respondents it was not possible to separate fuel poverty from poverty in a more general sense (as the LIHC does); that vulnerability and disconnection from the political process posed a serious threat to efforts aimed at helping those in need; and perhaps most importantly that there remains a reasonable level of disagreement surrounding how best to tackle fuel poverty.

Technocentrism and behaviour as a driver of fuel poverty

As Rose (1991) notes, techniques of governmentality are based around the creation and constitution of fictive realities for the operation of government. As such, the definition of the term "fuel poverty" and how we measure it may be seen to have a profound impact on the way we tackle the issue. Basing fuel poverty around what we term a technocentric view, as we have seen has had major implications. Middlemiss (2016) notes that in order to properly understand fuel poverty, it is necessary to first understand the subject of fuel poverty or the fuel poor themselves. By taking on an increasingly technocentric view however this becomes decidedly difficult as the role of the fuel poor in fuel poverty becomes marginalised almost to the point of irrelevance.

The research undertaken on fuel poverty strongly disputes this idea of the role of the individual having no meaning in the construction of fuel poverty. One of the main concerns supporting the fact that reducing fuel problems to only a fundamentally technical issue—at the expense of human factors—is the idea of how we consume energy. This is clearly argued by Serret and Johnstone (2006) who note in their work on the distributional impacts of environmental policy that poorer households require a much higher discount rate to make 'warming' (i.e. insulation) investments (Train, 1985) in addition to the fact that the poor do not necessarily use energy in the same way as the rest of society (Boardman and Milne, 2000; Walker and Day, 2012; Santin, 2011). This is coupled with the fact that subsidies and financing are used far more frequently by high income households. A recent example of this phenomenon can be seen with the UK's no defunct Green Deal, where low income households were often paying for the finance packages and subsidies high income households were using. Furthermore, the behaviour of different groups with regards to a policy can imply further distributional inequalities (Serret and Johnstone, 2006).

In the case of our research, this proved overwhelmingly true and while we would like to acknowledge the limited size of the sample, our experience conducting the research was that there was an enormous range of behaviours present amongst the fuel poor. While it was evident in the research conducted that the majority of people living in fuel poverty did indeed have modest incomes and energy inefficient homes, this was not necessarily the case. As such the tendency of the LIHC to ignore behavioural aspects of fuel poverty may be seen as problematic.

There were clearly households who were constraining their own ability to be both comfortable and financially secure. While this is not the norm, the head of Draughtbusters highlighted several recent cases in particular that stood out. These included a single mother who had been "heating her house and then opening the windows when it became too warm" and a family who would "heat their home to 27 degrees Celsius when it was snowing outside" (HLO, Interview, August, 2015). Despite this, all of these people had called up fuel poverty charities seeking help or had been referred to them through some other means.

This was in addition to our experience interviewing households in fuel poverty where the range of differing levels of thermal comfort was immediately apparent. The two households with children tended to heat their homes more with one noting that

It does put a real strain on finances but when you have young kids you can't afford to let them go cold so we just turn the heating off normally when they go out and turn it on when they are home. (Jane, Interview, March, 2016)

Another example was of a young woman in her 20's who lived in a converted warehouse (converted in the most generous sense of the word) and who noted how she and her flatmates

... just wear coats in the winter or two pairs of trousers. We were desperate to live in a warehouse space and after what we pay already for rent, there is no way we can afford to heat it over winter. (Molly, Interview, April, 2016)

Finally, an elderly respondent noted that they had

...no idea really how to control the heating since they installed this new system. I just let it get on with itself. (James, Interview, April 2016)

This serves to highlight two major issues surrounding an attempt to frame fuel poverty in terms of purely efficiency. The first is that in some cases, fuel poverty is as much a result of 'improper' energy use and behavioural practices related to this such as the examples of family heating their home to 27 degrees or the pensioner having no knowledge of how to control their thermostat. These are two cases of people who are suffering as a result of fuel poverty which is not necessarily due to a lack of energy use (in)efficiency. As a result, they are also likely to find themselves failing to meet the government definition of fuel poverty given that their calculated energy need will be less than their energy use. The head of Draughtbusters noted that in the case of the family heating their home excessively or leaving the windows open, their bills were estimated at "40% higher than necessary." In order to fix this, all that was required was a change in behaviour and subsequent practices and a little bit of attention paid to making "small constant adjustments" to the thermostat.

The other side of this issue involves those like the woman living in the warehouse who admitted when asked if she received energy efficiency upgrades what would happen. She replied the following:

In all honesty, we would probably keep the same level of heat and just pay a bit less although as we already don't actually heat the place I am not sure how much money we would gain. I doubt we would actually see much of a difference around here though in terms of heat. (Molly, Interview, April, 2016)

This statement highlights a key issue in that as we saw, the fuel poor do not necessarily use energy in the same way as others (Boardman and Milne, 2000; Walker and Day, 2012; Santin, 2011). This confirms the research undertaken by Boardman and Milne (2000) which estimates that as little as 30% of any energy efficiency upgrades would actually be taken as heat with the rest consumed in terms of financial savings, an issue which will be explored in the subsequent section on practices of fuel poverty.

The practices of fuel poverty

There is more than a bit of irony with regards to the government's attempts at tackling fuel poverty in the pre-Covid era. On the one hand, we have the LIHC indicator which is an attempt at re-framing fuel poverty as an issue of energy efficiency, while on the

other we have policies like ECO which are an attempt to remove barriers to participation in the energy market for the disadvantaged. This indicates that a rational and agentic actor is key to the government's policy with proper choices being key to alleviating energy poverty (Middlemiss, 2016). Despite the fact that current thinking calls for a form of policy based around a rational agent acting as the government deems appropriate, the government has formalised fuel poverty as a structural issue in which people are inherently constrained in their options or 'stuck' in an inefficient property. The result is a situation in which all alternatives to tackling fuel poverty are obscured and marginalised due to the fact that fuel poverty is a structural problem yet the solution lends itself to a decidedly non-structural approach based around the assumption of rational agency and sticking firmly to a neoliberal form of governmentality in which the state seeks to utilise an individual's "free choice" as a means to conduct policy. Clear parallels can be drawn here to Energy Performance Certificates (EPCs) and the Green Deal were the implementation of choice acted to obfuscate the loss of accountability on the part of the government.

As we will see however, the injustice of fuel poverty needs to be understood in multiple interconnected ways (Walker and Day, 2012, p.73). As Walker and Day note, households are not inherently vulnerable. Instead vulnerability may be seen to develop as a result of everyday practices and norms in addition to structural constraints.

In order to examine the practices of fuel poverty, three case studies from the research undertaken with sufferers of fuel poverty will be examined. Before this, however, it is crucial to remember that under models of behaviour such as those highlighted by Shove (2003), behaviour is not performed for the sake of the behaviour itself. Rather, behaviours are a part of practices in pursuit of broader objectives. It is largely for this reason that in many cases, behaviour is relatively unpredictable as the nature of the overarching objective is often seen to have more impact on the behaviour than, for example, the attitudes surrounding the behaviour itself.

The first case we wish to examine is that of a mother caring for two young children with a working husband who had recently had energy efficiency work done on their house. When asked to outline their energy use before and after having energy efficiency upgrades, two things became clear. The first of these was that an increase in efficiency as predicted by much of the literature did not necessarily equate to an increase in comfort. While there were obvious benefits which did equate to an increase in comfort to some extent, such as less draughts, the majority of the time the indoor temperature remained very similar. The interviewee had this to say, noting that

Since we have had the work done, I don't feel a big difference. Because of the kids we would always try to keep the house decently warm when they were home anyway and when they are out, we still feel as if we need to save money by keeping the heating off as there are so many other costs. We save some money which is nice, don't get me wrong but not enough to make a radical difference. (Jane, Interview, March, 2016)

This highlights our second point in that the primary motivation for their heating and energy use appeared to be the practice of caring for children with the majority of answers seemingly linked to how she aimed to provide the best atmosphere possible for her children while also balancing her budget. Therefore, while the upgrades were successful in some ways, in that they served to cut energy use, they have done little to lift her out of poverty or increase overall levels of comfort. Thus, depending on how you view the goal of policies aimed at cutting fuel poverty, it is arguable how successful they have been.

The next example is that of the young woman sharing a converted warehouse with her friends. While they had not had insulation and energy efficiency work done—they were unaware what existed in terms of government schemes and did not have a good relationship with their landlord—their heating and energy use was interesting. As noted previously, they outlined how they simply do not turn their heating on as it does so little and costs so much. Thus, for them, there are concerns beyond warmth. These were typically related to social activities and nightlife in the case of this warehouse and interestingly as noted before, when asked what would happen if they had a radical energy efficiency upgrade, their response was still

I think we would keep the heating off as it would already be a lot warmer and I quite like hardly paying anything for energy bills. (Molly, Interview, March, 2016)

Another member of the house agreed, saying

Ya I think that sounds about right, given that we survive as it is now, I feel pretty confident that if this place was properly insulated, I could survive! (Tom, Interview, March, 2016)

Once again, the primary motivation outlined with regard to energy use was not establishing levels of comfort as, in this case, it was about saving as much money as possible in order to pursue a more exciting social life.

While there were two other examples of similar situations in which an upgrade in efficiency did not necessarily translate to a notable increase in warmth, for the final example, we highlight a relatively positive outcome. In the case of this interviewee, he had undertaken energy efficiency improvements and was the only respondent to note an increase in warmth as a result of increased efficiency although ironically, he actually ended up using almost as much energy. When asked about his energy use pre-treatment he replied

I used to turn the heater on for a quick blast when I got up in winter and then a short burst before I went to bed to help make getting to sleep a bit easier. Basically I just did what I could within my budget to make my flat as bearable as possible. [...] Once I had the work done, it was a big difference, I only had to turn the heat on to about half of what it was on before for the same results so now I can have it on for about twice as long every day which is nice as I can put it on when I come home from work and eat dinner.... (Frank, Interview, April, 2016)

This raises two points. The first is that, during this research, this was the only person living alone who was primarily concerned about comfort when heating his house as opposed to others who were primarily concerned with saving money. Whether or not this is because living alone without children or having a job meant he had slightly more disposable income, or whether the fact that he lived alone and therefore was not obliged to care for anyone other than himself, or both is hard to say. What was clear is that a relational sense of care or a sense of obligation to commitments made with other members of the household was frequently a motivator for energy consumption in all of our other cases.

The second finding here is that there was a trade off between increased warmth and energy and/or financial savings. While the majority of those who had energy efficiency work done on their houses failed to see significant increases in comfort, they did typically see savings in terms of energy consumption and money choosing to heat their homes to somewhat the same level as before for a lower cost. Conversely, the one respondent who noted a significant increase in comfort used the same level of energy as before for the same price but for a more comfortable environment.

This lends itself strongly to the notion that poverty may be seen as a driver of fuel poverty as when respondents had the option to heat their homes more without experiencing rising costs, they mainly chose saving money over increased comfort. It also highlights the fact that separating wider behaviours and practices from fuel poverty is seemingly impossible. Whether it was the practice of caring for your children or maintaining a social life, behaviours which were irrational under the pure logic of energy use and comfort were clear to see. When combined with other examples from the research such as pensioners unable to understand their thermostat or people fundamentally misunderstanding how to effectively use energy, we see a world in which the LIHC indicator is potentially inappropriate. In the case of people who are struggling financially yet have relatively energy efficient homes, the LIHC definition would most likely place them outside of fuel poverty given their low costs. Our research, thus, suggests that other concerns such as caring for sick or ill family members or having other more pressing expenses such as socialising with friends or repairing your car which is vital to your income, mean that you may choose to deliberately not heat your home in order to save money. Therefore while some are not technically fuel poor under the governments definition, they are likely experiencing many of the effects of living in a cold home because of reasons they feel are outside of their control. As such it is seemingly impossible to ignore behaviour as a driver of fuel poverty, in addition to poverty more generally, as the conditions imposed upon people through poverty often lead to a situation where individuals feel forced into actions they would not otherwise choose.

It is vital to remember that for those fortunate enough to have money, it is not always easy to assume what those who are not so fortunate will do with their money. While the government assumes (DECC, 2015) that energy efficiency improvements will serve to increase levels of comfort and warmth, there were multiple examples of people heating their homes so little to begin with that savings never materialised in addition to highlighting numerous other priorities above warmth for people suffering from fuel poverty. As such, the reality is that the fuel poor are poor in every sense of the word and are subsequently lacking finances for numerous other aspects of life.

This brings us to the next key point surrounding the technocentric approach to dealing with fuel poverty in that it serves to fundamentally differentiate poverty and fuel poverty as two separate issues, one with complex social underpinnings and another which might just requires a new boiler and some insulation.

The distinction between poverty and fuel poverty

As Middlemiss (2016) notes, what this represents is a different way of conceptualising what Rose (1996, 1999) refers to as the problematisation of an issue and how and by whom aspects of the human are rendered problematic. In the case of the UK government however, they fail to render aspects of human behaviour as problematic, instead preferring to routinise singular solutions to specific problems into generalised solutions (Villadsen, 2011). The result of this, as we have seen above, is the notion that fuel poverty and poverty are two separate things, independent of each other with different causes and different solutions with one inherently political and the other inherent depoliticised.

The first and major implication of this separation is that if we take fuel poverty and economic poverty to be separate 'entities' and/or 'states of being' which are treated through different means of delivery, then treating fuel poverty becomes no guarantee of lifting someone out of more generalised poverty. While it might serve to increase the energy efficiency of the UK housing stock and stem the tide of overconsumption with regards to energy, poverty and inequalities remain and are not dealt with at any structural level. This then leads to a situation where governments are effectively forced to make a choice when conducting policy as to whether or not they value energy efficiency above poverty or vice versa as the reverse is equally possible whereby raising someone out of poverty subsequently fails to improve the environmental performance of their property while also transferring the obligation to act onto the individual such as with previous schemes such as the pre-Covid Green Deal.

Furthermore, it was clear from the research conducted that fuel poverty as a concept did not appeal to those suffering from it. Out of the five households interviewed, not one of the respondents tended to view themselves as fuel poor with the common

theme being that respondents either viewed themselves as struggling or just part of the "regular" poor. Indeed that these participants were classed as being in some way a specific kind of poor, i.e. fuel poor, was met with ridicule with one respondent noting how

It makes me sound like I drive around in a Ferrari all day and then come home and cannot afford to heat my house. (James, Interview, April, 2016)

This respondent noted once again how their financial situation was something consistent across their whole life with broader consumption choices and sacrifices constantly having to be made on a daily basis. This could be anything from eating cold food to not repairing broken items in their home to wearing old clothes. As such they were quite clear in that any attempts to bring them out of fuel poverty would do little to nothing to solve the rest of their financial problems being experienced. Another respondent echoed very similar sentiments stating that they

...think its all a bit of a farce really. The biggest issue we face is that we have multiple children, I can't find a job at the moment and my husband's salary is not sufficient for everything we need. Sure you could better insulate my roof and sure I would probably be grateful but the idea that this somehow solves my problems [is wrong]. (Jane, Interview, March, 2016)

Finally, the flatmate of the participant living in the warehouse also noted that of all the problems he was facing,

Being cold was near the bottom of the list. (Tom, Interview, April, 2016)

Thus, crucially, as all of this research shows, poverty and fuel poverty are almost inextricably linked. As listed in the government's annual report on fuel poverty (DECC, 2016), the government views the three main drivers of fuel poverty as household income, household energy requirements and fuel prices. To paraphrase this in the words of Boardman (2010), the author of the previous 10% definition, this can be seen as low income, high fuel bills and energy inefficient homes. As Middlemiss (2016) notes, two of these factors can definitely be seen as general drivers for poverty with the main factor separating the fuel poor from the poor is the fact that fuel poverty, as Boardman (2010; see also Liddell, 2012; Day and Walker, 2012) puts it, can be viewed as necessitating capital investment. As such Boardman seeks to separate poverty from fuel poverty by highlighting how a lack of capital expenditure may be seen to cause fuel poverty. As Middlemiss (2016) points out however this argument may be somewhat flawed given that a lack of capital expenditure may be seen to lock one out of various other opportunities in life extending beyond fuel and energy efficiency.

As such, the current logic states that by investing in energy efficiency, it is possible to lift people out of fuel poverty and you can only be classed as fuel poor if the poverty you are experiencing can be solved through energy efficiency. This should been seen as a gross oversimplification of how poverty functions and also a highly convenient distinction between fuel poverty and poverty that leads the government to propose particular sorts of problem definitions and solutions with respect to living comfortably in a home.

The real question then becomes the following: is it even possible to lift people out of fuel poverty without first lifting them out of poverty? The cases, evidence and past research outlined above imply that this is exceedingly difficult. Furthermore, is this even within the scope of pre-Covid policies aimed at tackling fuel poverty? While the tying of energy efficiency improvements to social and economic inequality may well be a noble idea—i.e. we are going to spend public money on energy efficiency—then we may as well allocate it to those who are incapable of providing it for themselves. This raises a very real issue of whether policies such as the now defunct Green Deal or ECO are appropriate for tackling poverty, which in hindsight, it suggests they are clearly not.

However, the results of this analysis depends to some extent on how one views the overriding goal of attempts to tackle fuel poverty. Fuel poverty legislation may either be seen as an attempt to prevent low income homes from the negative health consequences of a lack of affordable warmth, a means of reducing poverty by lowering energy bills, or a means of targeting low efficiency properties which, given the financial situation of their inhabitants, will not otherwise happen.

The main issue here as pointed out by Sarah Chapman (*New Statesman*, 2016), a food bank volunteer within the UK, is that based on her experience working in a food bank, fuel poverty and food poverty go hand in hand and therefore to reduce every individual

aspect of poverty to some different technical problem would be ludicrous and ineffective. As such if one agrees that targeting not necessarily the poorest but the least efficient homes would have the largest environmental impact, and an increasingly fair distribution of wealth within society would have the greatest impact on poverty, the motivation for combining efforts to tackle poverty and energy efficiency together becomes increasingly economic sound.

What appears clear though is that this desire to tackle both issues simultaneously has led to the locking in of a neoliberal approach to tackling fuel poverty which has had a double impact in terms of the unequal distribution of resources as past UK policies such as the Warm Homes Discount and ECO are funded by levies on energy bills which in turn would require general taxation to offset. This deliberately encourages the ECO to stay small in order to not disadvantage those it is trying to serve (Middlemiss, 2016). This once again serves to seriously question the appropriateness for the ECO to tackle issues of poverty, as the greater the scope of its success, the higher the impact it has on the energy bills of the poor including those who are poor but not fuel poor.

Vulnerability and disconnection

Furthermore, by reducing fuel poverty to an issue of efficiency and removing the political aspect of deciding who we should care for in a society, the government is fundamentally ignoring the political nature of care as a practice with winners and losers given its inevitable impact on the distribution of resources. By removing any potential for inclusive participatory solutions to the issue of fuel poverty, the government is threatening to alienate large portions of needy populations thus threatening their own objectives.

The pre-Covid policy of tackling fuel poverty under the coalition government was based around targeting the "most vulnerable" which includes those with the largest fuel poverty gap (between what they can afford and pay) and those who are deemed as naturally vulnerable such as the old and disabled. Strangely however, the DECC estimates that as much as 80% of fuel poor households contain at least one person classified as vulnerable (DECC, 2015, p.51) which begs the question of why it is even necessary to make sure fuel poverty targets the most vulnerable other than an attempt to reconcile fuel poverty policy with austerity strategies (Middlemiss, 2016). This aside, there is an obvious problem here in that the most vulnerable, be it the poor or the elderly or the young, are typically the ones most alienated and disconnected from the political process (Ribot, 1995; Bickerstaff et al. 2013; Bouzarovski et al. 2013). This is problematic in the case of fuel poverty however as the majority of policies aimed at tackling fuel policy are to some extent voluntary in nature in that they require the person in need to actively seek help. There were multiple interviewees for example who had never heard of the Warm Front scheme, Winter Fuel Payments or the Warm Home Discount despite being eligible for one if not all of them implying that in many cases, assuming those in need will take the first step is often overly optimistic. One respondent noted the following when asked why if they are on a pre-payment meter they did not apply for Winter Fuel Payments:

I've never heard of them? How am I supposed to know about this? (Molly, Interview, April, 2016)

Harrington et al. (2005) conducted similar research—as did O'Neill et al. (2006)—with both finding that in many cases, respondents had not heard of schemes in place to provide them with cheaper fuel bills or energy efficiency grants.

This was a common theme with people suffering from fuel poverty frequently being unaware of policies in place to help them until informed by experts. The head of the local fuel poverty organisation noted this as well saying

You'd be amazed how many people don't know what's in place to help them but it's more than that. Some of them are embarrassed to ask for help, some feel ashamed that they cannot heat their homes and that is a big problem. (HLO, Interview, August, 2015)

This serves to bring up another issue surrounding the disconnection of the vulnerable in that seemingly according to the head of the fuel poverty organisation, it is not rare to see people reject help. He noted that although they offer assistance for free through their organisation

A lot of people are determined to try and pay something even if it is not much just as a token gesture (HLO, Interview, August, 2015)

This had a compounding effect with multiple respondents noting how they were already sceptical of the political process and their situation served to reinforce this scepticism. One respondent was particularly vocal on this topic stating the following:

I don't look at whether or not the government can help me 'cos I already know the answer. They're good for nothing. (Molly, Interview, April, 2016)

Ironically this may be one of the cases where she was able to receive help; however her inherent distrust for the government amongst other things prevented her from seeking help. There was an innate distrust of the political process, which prevented her from considering what might be available.

This can be amplified in the case of certain groups in particular with Bouzarovski et al (2013) noting in a paper on fuel poverty how urban youth are frequently disconnected and often disadvantaged noting how for example some youth would deliberately ask their parents to call for them as they feared not being taken seriously. As was found, multiple respondents noted how they felt that because they were young and students, landlords deliberately ignored fixing leaks or draughts and often left houses in poor condition because they were not concerned about the implications of this. While this case deals with youth, this could easily be extended across vulnerable groups potentially highlighting once again, how the issue of vulnerability can prevent solutions from coming to light.

We questioned the young warehouse respondent as to whether she felt confident that with minimum standards for landlords renting in terms of EPC scores coming in soon, her landlord might feel pressured to act on this however there was an overwhelming sense of negativity with the respondent stating:

No, I don't think so. He is useless our landlord. Whenever we ask him for anything he says yes and then months later nothing has happened (Molly, Interview, April, 2016)

When we inquired why she thought this might be there was not a clear sense of any direct reason related to youth but there was definitely a feeling of exclusion as she argued

I just don't think he thinks that it is worth it. If we leave he knows he can replace us instantly so there isn't really much pressure on him to act. We don't have a lot of money, he knows we want to live here, so what are you going to do?

This not only highlights how a sense of perceived inability to do anything about one's situation makes one less likely to act in future but also how in the case of some people, they feel as if there is not a viable space in which to fight for themselves and express discontent. The head of the local organisation echoed these concerns noting

The definition of fuel poverty is more of an organisational tool. People who are actually suffering from fuel poverty in reality have very little concept of what the government's technical definition means and what it implies for them. What this means is that fuel poverty legislation is frequently failing to target the people who need it either because they are not sure they qualify for fuel poverty, are not aware of an overly specific and technical definition which to them doesn't impact their daily lives, or they don't meet the definition for one reason or other despite the fact they are suffering (HLO, Interview, August, 2015)

While having a definition of some sorts is inevitably necessary, making it overly narrow and inflexible can lead to the a situation where those most in need are ostracised and find themselves both literally and metaphorically out in the cold in both pre- and post-Covid times.

Conclusions and Policy Implications

Ultimately, we have argued that the reduction of fuel poverty to a technical issue based around energy efficiency, and one where the primarily solution is capital expenditure, may be seen as a flawed exercise which greatly oversimplifies the causes of poverty, fuel or otherwise. Using real cases from people suffering from poorly heated dwellings, and who are struggling to meet their fuel costs, we highlighted situations in which a variety of factors, including behaviour, and perceived exclusion and disconnection from the political process, where just as important as a lack of capital expenditure in lifting individuals out of fuel poverty. As such, in pre-Covid times, while fuel poverty strategies may have been well intentioned and had the right desires, they were often failing to deliver as highlighted by the consistent rate of fuel poverty experienced by those within the UK.

By failing to take into account how poverty and vulnerability may be seen to develop as a result of everyday practices and norms in addition to structural constraints, the UK government fundamentally ignored the role of inequality and social tension in creating the fuel poor, instead reducing everything to technical problems based around efficiency; this is only gotten worse post-Covid as inequalities and poverty has worsened in many respects do to the cost of living crisis. We are then left with a situation whereby the rights and needs of marginalised groups must be recognised, treated equally and offered a genuine procedural presence especially at this critical moment in this post-pandemic moment of 2023. Not only this, but this serves to further disconnect groups who are already sceptical of the political process to such a degree where in many cases, the stated aim of helping the most vulnerable becomes increasingly jeopardized.

While the scope of this paper was primarily to highlight individual cases which demonstrate the difficulties of an increasingly technocentric definition of fuel poverty—and do so in pre-Covid times—our research, along with a discussions with the likes of Draughtbusters has led us to several recommendations regarding the current policy landscape in the post-Covid era.

The first is to reconsider the importance of behaviour when dealing with fuel poverty. While not necessarily the case, fuel poverty can be the result of improper heating use or specific behaviours rather than solely an issue of energy efficiency. Therefore, considering ways to educate individuals in addition to providing material assistance seems like not only a way for policy to have a greater impact but also to offer substantial costsaving opportunities. It is important to refocus critical discussion on the practices of heating and 'comfort' and increase the levels of reflexivity at which these occur without overtly responsibilising the most poor and vulnerable for being able to live comfortably and shifting blame on to these day to day practices. They must be understood as practice situated within networks of behaviours, beliefs, feelings, outcomes and, of course, economic contexts.

The second recommendation is that as a result of increased levels of political disconnection and social exclusion, many vulnerable individuals suffering from fuel poverty are unaware of schemes in place to help them. This has multiple implications. The first is that schemes tackling fuel poverty must come from a source that sufferers are receptive to,

and this potentially means moving efforts to tackle fuel poverty to a more grassroots or local level which is capable of utilising and supporting local networks and expertise. Not only are local organisations or authorities better placed to identify cases of fuel poverty, but in many cases they are able to treat it at a reduced cost and a more case by case, contextualised basis, as evidenced by the ongoing work of Draughtbusters.

Following from this, many vulnerable individuals find the working definition of fuel poverty confusing and not relevant to their situation. Therefore, considering alternative approaches to participation, such as rights based approach advocated by Walker and Day (2012) might be beneficial. Such an approach focuses on the recognition of diverse and marginalised groups—rather than waiting for those in need to come potentially come forward—and at its core promotes avenues for procedural justice backing up a set of substantive rights such as the right to affordable warmth. This allows individuals to contest their situation in an institutionally legitimised space if they feel as if their rights have been breached, rather than dealing with overly technical and confusing definitions.

Another implication of this disconnection is, as noted by the case of the warehouse for example, respondents feeling unable to take action, or unable to encourage landlords to do so on their behalf. The head of Draughtbusters was keen to stress that as well as encouraging individuals to take action, it is crucial for the government to adopt rigorous standards, and to make these widely known and easily enforceable as current standards are "weak, and not achieved in practice" with the worst landlords "actually being responsible for causing fuel poverty." This could include the adoption of standards such as Passive House Heating or the Minergie standard for new builds and renovations, in addition to increasing the range of procedures and materials supported such as draughtproofing or floor insulation.

Finally, as we saw, it is important to acknowledge and engage with the price of energy and the financial structures of wider UK energy policies. As noted, current UK policies related to fuel poverty and home energy efficiency are encouraged to stay small as they are often financed by levies on energy bills, negatively impacting on the poor outside of fuel poverty. Furthermore, as the head of Draughtbusters stated, the fuel poor, given the likelihood they are on prepayment meters, typically pay the highest energy prices, especially post-Covid. Since the introduction of median spend however into the LIHC definition, energy prices have significantly less impact than before, meaning the implications of this are often less than visible. It is crucial for government policy to look at ways of regulating this pricing, as a system which forces those in poverty to pay the highest tariffs while simultaneously trying to lift them out of poverty is self-defeating.

Similar to what Middlemiss and Gillard (2015) and Fahmy (2011) argue, it is vital that policies aimed at tackling fuel poverty make a more comprehensive effort to understand the lived experiences of the fuel poor. As outlined in this study, a range of factors beyond energy efficiency play a crucial role in keeping people in fuel poverty, and a failure to acknowledge these factors hamstrings efforts to tackle this issue, including often times increasing the cost of potential interventions as well as reducing their impact. Further research—specifically in this post-Covid era of the growing cost of living crisis—into how factors such as these could be adequately adapted into the policy framework is needed, with a particular emphasis on how best to identify and increase participation of a range of diverse and marginalised groups in fuel and wider poverty reduction schemes in the UK.

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