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Utilising a Critical Realist Lens to Conceptualise Digital Inequality: The Experiences of Less Well-Off Internet Users

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Abstract

This study aims to contribute to existing understandings of the relationships between social inequality and Internet use through 30 in-depth interviews with people in Britain who have digital access, are digitally competent, and use the Internet for a broad range of purposes, yet come from lower socio-economic backgrounds. Using a critical realist lens, it examines the everyday experiences and implications of using the Internet for this group. The paper explores individuals uses of the Internet, the ways people are able to exert agency using the affordances of the Internet and the structural conditions which constrain or enable what is possible for participants to achieve. The analysis provides a way to understand the complex mechanisms of agency and structure that help to explain the varied outcomes of Internet use for different individuals; and promotes a move beyond a focus on access and skills in digital inclusion policies.

Keywords

digital inequality, digital divide, Internet use, digital skills, critical realism, digital inclusion

Introduction

The realities and implications of the 'digital divide' have become more visible since the onset of the COVID-19 pandemic. This has led to numerous policy actors calling for an intensification of efforts to address digital inequalities (e.g. OECD, 2020; Bowyer et al., 2021). This is not a simple task. Multiple studies have shown that technology is not a straightforwardly positive thing, and that the links between technology and inequality are highly complex and multifaceted (e.g. Chen & Wellman, 2005; DiMaggio et al., 2001; Gunkel, 2003; Eubanks, 2011; Kvasny & Truex, 2001; Mansell, 2017; Scheerder et al., 2017; Warschauer, 2004).

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A key problem with many policy initiatives to address inequalities through digital means is their individualised focus. For example, in Britain the COVID-19 policy response has largely focused on access (where Internet service and mobile providers temporarily reduced costs and removed data caps; government and charity schemes distributed laptops, tablets and routers); and skills training (via online courses and college courses for adults with low levels of formal educational qualifications; and online resources for parents and children to reduce online harms and disinformation) (Baker et al., 2020). This follows a long trajectory in such schemes in Britain and elsewhere where the focus is on supporting individuals to create their own opportunities and achieve an array of social outcomes (Helsper & van Deursen, 2015). For example, using the Internet to get a job or gain qualifications regardless of current employment conditions or costs to access formal education. In doing so, the discourse places attention on the individual and largely ignores existing social divisions and unfairness in society at a more structural level (Stevenson, 2009; Eubanks, 2011; Kvasny & Truex, 2001). This, of course, is not unique to digital policies: 'responsibilisation' of welfare is characteristic of the neo-liberal philosophies of many governments (Juhila & Raitakari, 2016) and is a common policy trope in many initiatives designed to support 'social mobility' and address social unfairness (Payne, 2012). Nevertheless, it remains a problem.

In academic research, the relationships between individual Internet use and social opportunities are typically understood within the classic sociological problem of structure versus agency. Indeed, numerous academics engaged in issues of digital inequality have engaged with this question, drawing on social theorists such as Bourdieu (Clayton & Macdonald, 2013; Gilbert, 2010), Weber (Ragnedda, 2017; Wessels, 2015), and building on these to develop new theoretical models of digital inequality (Helsper, 2012, Katz & Gonzalez, 2016; Selwyn, 2004; van Dijk, 2005; 2020). Within this domain, as in Sociology more broadly, digital inclusion scholars have tended to privilege either structure or agency, or these concepts have been regarded as inseparable.

This paper aims to contribute to this debate through reporting findings from interviews with adult Internet users based in Britain. The research explores interviewees experiences of using the Internet and the ways in which the Internet helped them to achieve (or did not help them to achieve) certain social outcomes. It focuses on a relatively unique group: people who have digital access, are digitally competent, and use the Internet for a broad range of purposes, yet come from lower socio-economic backgrounds. They are an ideal group to help to shed light on the role of the individual and the wider social structure within the debates on the relationships between digital and social inequalities (Eynon & Helsper, 2011).

A Critical Realist Lens

This paper applies a critical realist lens to explore how agency and structure both operate to explain the varied outcomes of individual's digital engagements (Bach et al., 2018; Oreglia & Srinivasan, 2016). A number of scholars of critical realism have attended to issues of society and technology (e.g. Elder-Vass, 2017; Faulkner & Runde, 2013; Lawson, 2007; Li, 2016); though fewer have made connections explicitly to studies of digital inequalities (although see Czerniewicz et al., 2009; Dobson & Jackson, 2017).

Critical realism is a third philosophy of science that is characterized by the three pillars of 'ontological realism, epistemic relativism, and judgmental rationality' (Archer, 2000: 137). Critical realism proposes that 'reality exists independently of humans' (Mingers, et al., 2013:796); that the nature of reality is not fully answerable through empirical analysis, and that the knowledge people construct about the world is ever partial and changing, and based on individual, social, cultural and historical contexts. It enables a critical stance, where different viewpoints can be evaluated as better or worse, and value claims can be made (Archer, 2007).

The critical realist view of reality is 'stratified, emergent and transformed by agents' (Fleetwood, 2014: 205). The reason why this stance is particularly helpful for resolving some of the challenges of current debates around digital inequalities is reviewed in this section.

Through its stratified ontology critical realism distinguishes between the real, the actual and the empirical (Bhaskar & Hartwig, 2010). The 'real' is what exists, regardless of whether people know or understand it. It refers to objective structural factors: structural (distributional, positional, organisational or institutional) and cultural (propositional, theoretical or doctrinal) entities (Archer, 2003: 138). In the domain of the real, the properties and powers of these entities come together to create 'society's deep sub-structures which are relatively enduring and which possess causal powers over social life' (Archer, 1995: 167, cited in Morrison, 2021:233). The powers that any object has are not inherent or fixed, but develop in a context where there are other entities each with their own properties and powers, all of which interact for an event to emerge (Fleetwood, 2009). Thus, for the purposes of this paper, attending to the real helps to try to understand the invisible and tacit social realities that may constrain or enable people's experiences and outcomes of using the Internet.

The 'actual' is what happens when the powers of objects in the real domain are activated in some way. Of particular interest here is what happens when people and the affordances of the Internet come together for individuals to achieve certain goals. The 'empirical' is what actors experience of the real or the actual (Sayer, 2000), which in this study is captured through the interviews and what participants had to say about their experiences of the Internet and their everyday life.

For critical realists, agency and structure are analytically separate. They are different kinds of 'things' that are not reducible to one another yet need to be considered in relation to one another (Archer, 2003; Sayer, 2000:13). This provides a valuable way to equally acknowledge the importance of people's actions and the role of social structure, when often one tends to be privileged over the other in studies of digital inequalities. Agency and structure are entities that have their own properties, in other words 'attributes, categories, features or characteristics' (Fleetwood, 2009: 346) and powers 'that designate[s] what something does, or can do' (Collier, 2004: 347; cited in Fleetwood, 2009). This is true of all objects, thus people and the Internet are also different kinds of entities and also have quite different properties and powers. It enables attention both upon the design of technology as well as an individual's use of it, and, as discussed below, how these can come together in different ways across people, contexts and timeframes.

'How society is organised, reproduced and transformed' (Faulkner & Runde, 2013: 803) occurs through the interplay between agency and these structures. Social change – or indeed social reproduction – occurs through the actions of humans and collectives as they encounter the properties and powers of social and cultural entities. This process is carefully detailed in the Transformational Model of Social Activity (TMSA), proposed by Bhaskar and the Morphogenetic approach proposed by Archer. In broad terms, there are three stages to social change, as outlined by Morrison: (a) structural and cultural entities are created from past interactions of social actors; (b) in the present time point, social actors – both individuals and collectives – try and achieve things in the world, and in doing so activate and encounter these structural and cultural conditions; and (c) at a later time point structural and cultural entities transform/reproduce as a result of agents actions in ways that are both intentional and unintentional (Morrison, 2021:232).

Within a critical realist frame the Internet can be viewed as an artefactual entity (Fleetwood, 2009), with distinct properties and powers that individuals can activate with the intention of achieving certain projects (such as using the Internet to acquire new skills); and that also plays an important role in understanding (and potentially changing) structures (Elder-Vass, 2017; Lawson, 2007). In this way, change (or reproduction) is possible but is understood as a non-deterministic process (Lawson, 2007). This model of social change is also useful as it moves away from the

tendency in digital inclusion policy to assume that individual changes via improving digital access and skills will fully address issues of inequality without proper attention to social structure (Stevenson, 2009; Eubanks, 2011; Gunkel, 2003; Kvasny & Truex, 2001).

Thus, critical realism can be a very helpful frame for studies of digital inequality. Critical realism provides a way to move beyond popular policy accounts of the relationships between social and digital inequalities where (rational) agency is primary and structure is collapsed into agency. It achieves this by recognising both agency and structure, and the emergent and relational nature of the social world. Using this lens, the research questions addressed in this paper are

1. What Internet activities do people undertake?
2. In what ways are people able to exert agency using the affordances of the Internet?
3. What are the structural conditions which constrain or enable what is possible for people to achieve when using the Internet?

These questions will be explored with respect to the experiences of those from lower socio-economic backgrounds in Britain.

Methods

The discussion below is based on analysis of interviews with 30 people in Britain from lower socio-economic backgrounds who have Internet access, adequate digital skills, and who report a broad range of engagement with the Internet. Britain provides a good context for this study. Around 90% of the adult population use the Internet and there are national policy commitments to improving digital access and digital skills via a combination of initiatives from the public, private and third sector (DCMS, 2017, Department for Education, 2019). The interviews took place in two phases over the period of a year. A purposive sampling strategy was utilised. In the first phase, participants were recruited based on their responses to a nationally representative survey of Internet use across Britain, and in the second, a specialist recruitment agency was used to recruit participants from a number of towns and cities across England. In each case, participants had personal access to the Internet and used the Internet on a daily basis, evaluated their digital skills as fair or higher, and used the Internet for a minimum of eight different activities at least weekly that reflected a range of communicative, entertainment, information seeing, learning, civic and or financial purposes.

They were all adults from a range of life stages and family circumstances with household incomes of less than £20,000 per year (the median household income in Britain at the time of the study was £26,500) and lived in one of the 20% most deprived areas in England based on the Index of Multiple Deprivation (IMD). Some worked, others were retired, some were unemployed, others were caring for young children or family members, and others had health problems that made it impossible for them to work. Typically, those who were employed tended to have traditional working class jobs, such as factory worker, bus driver, security staff or call centre worker. Some had experienced upwards or downwards social mobility. The majority felt like they were 'getting by' financially. They rarely described themselves as 'poor', but were not 'well-off' and careful budgeting appeared as a discussion in many of the interviews. This varied group were therefore united in that they had less economic resource than other groups in Britain. They are an ideal group to help to shed light on the role of the individual and the wider social structure within the debates on the relationships between digital and social inequalities (Eynon, 2021; Eynon & Helsper, 2011). Many would certainly be the target of digital inclusion schemes based on their socio-economic circumstances and geographical location.

The interviews took a narrative and biographical approach to exploring questions about participants' everyday life, their Internet use and the ways in which the Internet helped them to achieve (or did not help them to achieve) certain goals, alongside an encouragement to explore their own and their families social and economic circumstances and social (im)mobility over their life course. This emphasis on the lifecourse was important. Internet use is a dynamic and ever changing process (Murdock, et al., 1992) and enabling participants to reflect on how their lives changed (or did not change) as a result of using the Internet assisted with making social structures more visible.

The interviews took place over the phone, which created a useful space for discussing personal circumstances that at times may have felt too intrusive had the interviews taken place face to face. Interviews took around 45 minutes to an hour, and participants received a shopping voucher as a thank you for taking part. All the interviews were audio recorded and transcribed. The data were analysed using multiple rounds of qualitative coding to refine the themes, visualise the data and test alternative explanations (Dey, 2003; Richards, 2020). As will be discussed below, Archer's morphogenetic framing was applied through the analysis process, to make visible the relationship between agency, structure and social change.

Findings: The Use of the Internet to Achieve Everyday Projects

This section provides an overview of the core themes that emerged from the analysis of data. In the interviews, participants spoke about a wide array of Internet activities and their social implications across economic and cultural domains. From the analyses, there were seven areas of activity that were significant to the interviewees that illuminate not only their uses of the Internet, but make visible questions of agency and structural conditions. As is clear from the participants' explanations, outcomes of Internet use were both positive and negative (Scheerder et al., 2017); and were the result of the interplay between agency and structure (Kvasny & Keil, 2006).

Keeping Track of Finances and Saving Money

Price comparison was a strategy used by many interviewees, to get the best deals on one-off purchases, to ensure everyday expenditure remained on track and to compensate for high streets where many shops and banks had closed down. They also tracked offers and vouchers via email and social media. Strategies included following companies on Twitter, using temporary email accounts to get multiple discounts for 'first time' shoppers and engaging in competitions.

The majority of discussions about online shopping and banking were positive, yet there were some concerns about the ease with which money could be spent online, from gambling a little too much, to borrowing money. A member of Jessica's family[1] had mental health problems that had led to them going 'online and spend[ing] hundreds of pounds in one night' and getting online loans 'knowing full well s/he can't repay it'. Similarly, Fiona felt 'the Internet has made it too easy for people to fall into debt' due to the availability of so-called pay day loans. As she explained, 'those who can't work at the minute, or they are waiting to find a job (..) it's too easy for them to slip into that route'.

Job seeking

Many of the participants had looked for work online at some point or another, both for themselves and for their family. Most found it a relatively convenient way to look for employment. Some had been successful. Yet others had found it difficult as suitable jobs were in short supply. Amy had found the Internet useful to learn about jobs, and she even found her

'perfect job' (…) 'I had every qualification they wanted' but the job was an hour on the bus each way, and due to her disability 'I'm in too much pain if I'm sitting cramped up on a bus and I couldn't do it because it was too far'. Interviewees also talked about how technology had impacted employment in their area. Matthew talked about how the factory near him used to employ 'about 5000 people, and now you are lucky if it is 500' because of automation. Beth, doing an agency job for a bank call centre, talked about how she had to risk her own precarious job asking people on the phone to go online to do their banking, again highlighting how technology was reconfiguring employment opportunities in negative ways. Wider issues of the inequities in the job market were also raised in the interviews, with problems of zero hour contracts and agency work prevalent themes in the data, with digital technologies and globalisation often cited as reasons for these challenges.

Making Money

The Internet could also sometimes be a place to sell goods on a relatively casual and ad hoc basis. For some, it was just a way to make a bit of extra money from things that were no longer wanted, others occasionally bought things cheap from a market and then re-sold them to make a profit when the possibility arose. Facebook and Shpock were often the platforms of choice for these kinds of activities, as there were no fees and people could search locally and come and pick things up. In some cases, this was a source of additional income for holidays or savings, yet for others it was an activity that was essential to getting by in the immediate term. For example, one participant had recently sold their sofa to provide food for the family.

Some of the interviewees used the Internet to create mini businesses that sat alongside other day jobs and life commitments. For example, Sarah started selling a diet plan via Facebook when she was on maternity leave. She was able to do this 'purely online' and had made 'quite a lot of money' for a few months until Facebook became flooded with identical businesses. Sarah had tried a number of different businesses online, hearing about them on Facebook, and she had 'a flair for it'. The income Sarah made from these businesses ran 'alongside of' her main income. She did it to bring in income without needing to pay more money for nursery fees. Daniel had experienced some upward mobility in terms of where he was now living, but he recalled a time a few years ago, when he had a side business buying and selling things in eBay. With his friend, his business partner, they outsourced the website development and daily administration to India 'for pennies, basically'.

These examples show how people with varying degrees of financial need were able to use the Internet to make money with varying degrees of success. Participants like Daniel and Sarah had turned to the Internet as it enabled them to run businesses without the typical start-up costs of running a physical company, and because it provided flexibility to work around other work and (gendered) life commitments. The economic benefits of these activities tended to ebb and flow and were not relied upon. For others, selling household items or items found at a market was sometimes an essential activity to just get by.

Maintaining, Developing and Extending Social Relationships

Using the Internet to maintain and develop existing social relationships close to home and further afield was a common and important aspect for the vast majority of interviewees. Activities included sharing photos and messages with family and friends on various social media platforms, checking in with friends, arranging social events and discussing issues and topics of interest. In the majority of cases, these activities focused on maintaining and deepening existing relationships

with friends and family. Building significant connections to new people occurred occasionally but less often for the majority.

Social activities of this kind via the Internet were everyday occurrences for most interviewees, but were nonetheless meaningful. Amy explained how she felt 'Absolutely lost. I was lost without it because I had no one to chat to' when the phone company cut off her Internet access for 6 months due to her inability to pay her bill due to delays with her benefits.

Another important social dimension of Internet use was to access social support, with some comparing it to the advice they could get from family members or friends. Debbie described the Internet as 'a live women's magazine' that provided answers to problems about health, sex and relationships. 'I think it all stems back down to if you had a Mum to go to and have a cup of tea and say, 'Mum I've got this procedure going on next week, what do you think?' I haven't got anyone to talk to like that'. Jake, when asked 'what kind of person' the Internet would be, compared it to 'one of your parents (…) because whenever I was young and I needed advice or I needed to find something out, I would turn to my parents. So I would say the Internet is almost like a parent in the sense that you can go onto it and you can find out information that you need to know and it's there and it's always there to help you and give you that information'.

For those in this study who had experienced depression, were housebound, or lonely, the social possibilities of the Internet were particularly central as often it was the only access they had to others that they could afford or were able to deal with. Anne had suffered depression in the past. The Internet had been an important means for her to keep friendships going when she did not want to leave the house, and she had met others online who also suffered from depression, which had helped her to 'feel less alone'. She had kept in touch with a couple of people to the point 'they are kind of actual friends now, like even though I haven't met them in person and probably won't now'. The Internet was important to her, as 'it can change people's lives'.

Steven had suffered downward mobility as a result of a significant change in his health, and could no longer work or leave the house independently, although he hoped this would improve in the future. The Internet was helping him through this 'tough period' by providing social support. He explained, 'You realise that there are people out there that are worse off than you (…) You know, in fact I've gained more friends, virtual friends, than I had before'. It has also helped him find a way to 'show your friends and family that you are trying to do something with your life'.

Traditionally, the way that social support is envisaged online is often seen through social connections, yet some participants spoke of other ways it offered some solace. For Rose, 'look [ing] up really fantastic things' helped with dealing with being housebound. Martin, who cared for his disabled wife, had found that when he was going through a breakdown and did not want to go out, the Internet also offered a 'window' on the world. Seeing images and information online helped him to imagine what he wanted to do when he was better, and took him away from 'everything that you are stuck in sometimes'.

However, these social benefits did sometimes come with costs, including potential 'addiction'. Rose felt 'you can get sucked in. Especially when I was ill, I found I was spending an awful lot of time playing silly games on Facebook and where I was bored (…) I had to give myself a good talking to'. Similarly, Steven had found the Internet a double-edged sword, in that 'I did find that I was continuously stuck to my phone, my laptop and my television (…) It was a bad period really (…) the Internet did help me through that tough period, you know. It also created a lot of problems'. As in other spheres of life, the Internet offered both possibilities and challenges.

Civic Engagement

The Internet offered a way for interviewees to get their views across and engage in a broad array of civic activities, including signing petitions or emailing complaints about poor services to

companies and local government. Jake had blogged for his local newspaper about his experiences of being a security guard. Rose had got very engaged in local Facebook groups because of her level of dissatisfaction with the local council. Fiona, who 'loved my Twitter for the news', tended to tweet political statements when she was annoyed about a social or political issue, sometimes in response to debates on political programmes. Ben used Facebook to post about Brexit and to share information about the Black Lives Matter movement. Access to this information had encouraged Ben, a Black man, 'to get involved and actually do my own research about it and see what's actually happening'.

However, engaging in this way was not straightforward. Fiona had stopped using Facebook because the debates about Brexit were 'just driving me mad', often due to a lack of respect for different opinions. Jake had found blogging about his experiences quite challenging as he was already working two jobs, meaning 'it turns a 13 hour day into a 17 hour day' and so had stopped blogging for the time being. And despite her efforts in online campaigning, Rose felt that things were still quite desperate in her local area. 'I see kids walking the streets with nowhere to live. It's ridiculous, absolutely ridiculous. We have nothing. We have no youth clubs, we have no out of school hour things for kids, nothing'.

Information Seeking

The interviewees searched for an array of information to help them to find out about topics that were relevant to them, and to try to improve their well-being or circumstances in some way. Searching for news online was a popular activity, typically using Facebook and a variety of news apps to get the news quickly and easily, with some seeking a more 'holistic' view of both local and (inter)national events. Health information seeking was popular. Some, like Aileen, found it difficult to get a medical appointment for herself or her children and so looked online to see if she should be worried or not about particular symptoms or complaints. Susan always used the Internet to look up possible interactions or what the long-term effects were of the drugs she was prescribed and used this information with her doctor. As she explained, 'They say knowledge is power, don't they?'

Beyond health information, interviewees found out about benefits and other grants they were entitled to. Susan felt the Internet could improve someone's circumstances because 'you can go on there and find things what you didn't know existed. I mean you are not always told what is out there for you'. Joanne had also found it a place where she could find accessible information. She said 'I can get a lot of knowledge from [the Internet]. You don't want to be phoning people saying what does that mean and can you explain it to me. You can put it on, write in what you want to find out and you can learn (…) You can find stuff out and you can get up there with the best of them can't you?'

The success of these strategies varied. Talking about her mother's illness, Beth used the Internet to look up information before accompanying her to the doctors to try and secure her the right treatment. She was frustrated that after years of effort, very little had changed for her mum, despite the knowledge she had developed from her online research. Similarly, Fiona had found that online support had helped her feel better in supporting her disabled child, but that 'there was no [practical] support' available to actively change her situation.

Learning New Things and Gaining Qualifications

Relatedly, many participants talked about how they learned new things from using the Internet. Sometimes, the Internet was used to resolve questions that came up as part of conversation, finding answers to radio quizzes, or prompted by watching a TV programme or film. The Internet was also

an important place to pursue areas of long-term interest, and occasionally to support formal learning opportunities.

In government policy, lifelong learning is typically presented as a way for people to improve employment outcomes (Biesta, 2006). However, in this study the primary motive and outcome among the interviewees was learning for pleasure and sense of achievement. Anne looked things up 'if anything comes up in conversation or maybe if anything comes up on the news that I'm interested in or sounds interesting, but I don't really know much about it, I'll maybe Google it and find out more'. Michael liked to watch films, read books and explore on the Internet about 'real-life crime'. Lisa was 'well into history' and so 'if I want to know something about Henry VIII or Elizabeth I or the Vikings, I'll have a look up'. Others, like Karen, liked to browse Wikipedia to find out new things. She liked to explore the 'facts about the film' she was watching. 'And then before you know it two hours have lapsed and you're still on Wikipedia looking at God knows what from what you originally started to look at'. For Daniel, this opening up of knowledge via the Internet could benefit other aspects of a person's everyday life. He talked about how YouTube had made it possible to know exactly how to cook a recipe rather than pay for a meal in a restaurant, or to develop new skills independently of other formal organisations. 'You can find anything you want on YouTube (…) you can even go online and find out how to lay grass, landscape gardens, you don't have to be a tradesman to do it now'.

A few interviewees had found the Internet as a central source of support for formal learning activities. Anna left school at 16 and was able to 'do an online course and finish my qualification' later in life. Distance learning had been the only way she had been able to afford to learn, keep her full-time job and live independently from her family. Aileen had used the Internet for similar reasons and was the first person in her family to go to university. At present, she was 'not well-off' but was confident that 'this time next year I'll be more comfortable' thanks to her new degree and her plans to be a teacher. Others however, had not been able to manage formal education while working, regardless of the properties and powers of the Internet. Jake 'started a degree with [an online university], but I got half way through and (…) I couldn't keep up' due to the pressures of working full time. Hannah, who loved learning for personal interest, felt unable to 'go and train myself in my spare time' until she had more secure employment and was not reliant on agency work.

Others turned to the Internet for further learning opportunities but had not been able to find them. For example, Martin said he would like to do online courses that were not too expensive, which he could do at home to enable him not to feel 'caged'. The story was similar for Steven: 'Obviously I can't do a manual job again, (…) but, you know, I have got a brain and I like to use it'. Neither had found such an opportunity, or heard about Massive Open Online Courses (MOOCs) which may have provided what they were looking for.

Discussion

Considering the first research question, the people in this study were using the Internet as part of their everyday activities to achieve certain things that mattered to them. These cut across many aspects of everyday life: dealing with finances, socialising, supporting their well-being, managing home life, finding employment, developing personal interests and engaging civically. In some respects, these findings echo other studies. For example, in their earlier qualitative study of Canadian Internet users from non-professional backgrounds, Bakardjieva and Smith (2001) derived a number of 'little behaviour genres' of Internet use that overlap with what is found here, including using technology to deal with social isolation, connecting with friends and family across the globe and overcoming the mundane nature of many jobs. Quantitative research on more

general populations have also shown similar categorisations (Blank & Groselj, 2014; Helsper, 2021; Scheerder et al., 2017).

In relation to research questions 2 and 3, there was not any kind of clear and straightforward positive and/or negative outcome that could be mapped on to these uses of the Internet. Instead, the interview data highlights how agency and structure both operate to explain the varied outcomes of interviewees digital engagements (Bach et al., 2018; Oreglia & Srinivasan, 2016). Participants' uses of the Internet were more or less successful, for different individuals, goals, timescales and contexts. This could range from a one-off purchase via a price comparison site that saved money, finding out information to try to best negotiate the health and social care system that sometimes resulted in positive outcomes, maintaining friendships through a difficult period, or studying online over a period of years that, if possible to maintain while working and other life pressures, led to further job opportunities of varying kinds.

As noted in the introduction to this paper, the Internet can be viewed as an entity with distinct properties and powers that individuals can activate with the intention of achieving certain goals (Elder-Vass, 2017; Lawson, 2007). From the analysis above there are a number of ways that people were able to exert agency using the affordances of the Internet. Two particularly compelling cases were those where interviewees were entrepreneurial in the ways they leveraged the affordances of the Internet. These included using temporary email accounts to get multiple discounts for 'first time' shoppers, using eBay and other platforms to start businesses, and draw upon the global reach of the Internet to outsource tasks and buy and sell goods. A second important case was the ways that participants found ways to study and acquire qualifications, learn new things and find out information in order to try to improve a range of educational, economic and health and social outcomes for themselves and their families.

Of course, the affordances of the Internet are not always positive, notably the deliberate design of websites and apps to encourage user engagement to make profit. This was apparent in the concerns highlighted by some participants about the risks of gambling, and unhealthy levels of use of certain sites to compensate for difficult life circumstances. Such views are supported by research that has shown how the design of certain sites are informed by theories of psychology and addiction, to try to attract and keep users attention (Bhargava & Velasquez, 2021; Zuboff, 2019). Despite these potential risks, participants were demonstrating a clear process of navigation between the negative and positive aspects of the Internet, well aware of the problems as well as the possibilities.

Throughout the data, it is clear that it is not just the reflexive powers of individuals to use the Internet to achieve certain goals that fully explains the differences in the benefits (or otherwise) that people accumulate from using the Internet; the powers of social structures (including the distribution of resources, the availability of positions and institutional configurations) are crucially important as well (Archer, 2007). Indeed, moving to research question 3, there were complex structural conditions which enabled and constrained what was possible for these interviewees to achieve from their Internet use. Some had made money via selling goods on eBay and other sites to help pay for a holiday whereas others had sold items to feed their family. Some had found information online that made them feel empowered to deal with a particular issue or provide a way to access formal education that had led to job opportunities and economic mobility, whereas others had found the constraints of existing structural entities too significant to achieve similar goals despite the additional information or access to learning opportunities that were theoretically available to them via the Internet.

These differences can be understood as the inequalities emerging from the intersection of gender, disability, ethnicity and age (Clegg, 2016) along with economic entities. Due to the sampling frame and the size of this study, although there are glimpses of all of these issues (e.g. gendered aspects of work) the economic aspects are perhaps most pronounced. These include, the

changes in employment structures, the cuts to social support, inadequate legal provisions and the neo-liberal logics at the heart of many governments meritocratic strategies to address social inequalities that participants cited in the findings section above. Perhaps the most visible constraints in the data were the neo-liberal logics responsible for the lack of jobs in the local area, with many jobs that were available being low paid and precarious in nature; the closure of high street shops and banks which pushed people to shop online; and the hollowing out of the public sector leading to long waiting times for doctors' appointments and insufficient investment in local communities. The neo-liberal values were also reflected in the websites and applications that participants encountered and sometimes used (such as the proliferation of payday loan sites that are targeted at less well-off Internet users). In line with other critical realist work, it is possible to see how both privilege and injustice to occur at the same time (Clegg, 2016; Martinez Dy et al., 2014). As shown above, there were a few ways that existing structures enabled opportunities for participants, as in the case of Daniel outsourcing administration of aspects of his business to India. Although these examples were in the minority.

These experiences echo research that highlight the growing gaps between rich and poor in Britain and more broadly. It is well documented that income and wealth are increasingly concentrated amongst a minority. The richest 1% of the global population are getting ever more of the share of income and wealth (UNDP, 2019). Across OECD countries, 'on average, people in the top 20% of the income distribution earn 5.4 times more than people in the bottom 20%. The wealthiest 10% of households own more than half of all household wealth' (OECD, 2020:63).

What was also apparent from the data was people's desire for positive social change, beyond an improvement in their own circumstances. Interviewees were highly critical of existing policy strategies that reinforced and exacerbated inequality in Britain. Some were actively using the Internet to campaign for a more socially just world through, for example, making visible problems in the local community and engagement with the Black Lives Matter movement. As described in Archer's morphogenetic approach, people determine what particular projects and courses of action they want to pursue with some level of awareness of the constraints and possibilities of structures. They have 'the personal power to reflect subjectively upon one's circumstances and to decide what to do' (Archer, 2007: 11). It is through this process of individuals' reflective engagements with their own personal projects that people can contribute to transformation (in Archer's terms morphogenesis) or a process of structural reproduction (morphostasis) (Archer, 2007: 48). While changing structures is not straightforward, it is possible.

The value of a critical realist frame

Taking a critical realist frame provides a way to understand how people and the world come together each with their own very different properties and powers; and to help explain why there are different social outcomes for people with similar objective structural circumstances (Archer, 2007). It helps to explain how the same individual action (e.g. amount of times someone engages in job searches online) can have multiple social implications (e.g. finding a job on a secure contract vs. working in the gig economy or longer term unemployment). It provides a way to understand the complex mechanisms that help to explain these varied outcomes for different individuals, and accounts for both agency and structure in conceptualising digital inequality.

In Britain, as elsewhere, digital inclusion policy is primarily focused on providing better digital access and ensuring people have the skills to use digital technologies (Baker et al., 2020; Epstein et al., 2011; Van Deursen & Helsper, 2015; Mansell, 2017). Implicit in these initiatives is that if people have the necessary access and skills, then they are fully equipped to make the most of the opportunities of the Internet, using it to make money, learn, find employment and so-on, regardless of their socio-economic background. It is assumed that people can use the Internet not only to in

some sense level the digital playing field but also as a resource to achieve social mobility (DCMS, 2017).

Yet this is not what the data above suggests. Similar to other work in this domain, it is clear that outcomes of Internet use should not only be understood as the product of access and skills, and that it is important to attend to structural conditions (Eubanks, 2011; Mansell, 2017).

Beyond Access and Skills in Digital Inclusion Policies

As noted above, individuals, through their reflective engagements with their own personal projects, contribute to a process of structural transformation or structural reproduction (Archer, 2007: 48). Through using the Internet to achieve a project whether this is to get a better job, improve health or reinforce personal relationships, people activate their own powers (e.g. reflexivity and practical skills to use the Internet) at the same time as activating powers of other entities, including the affordances of the Internet and the powers of structural and cultural entities (e.g. distribution of resources), to create some kind of social outcome (that can be positive, negative or both). This action has consequences for the individual, but can also have impacts at the macro level in terms of social change – whether this is to reinforce the status quo (morphostasis) or lead to change (morphogenesis) (Archer, 2007).

In critical realist terms then, it is therefore important to attend to the properties and powers of the Internet, the properties and powers of the people who use it, as well as the properties and powers of social structure (Elder-Vass, 2017). If policy makers are genuinely committed to using technology to create positive social outcomes, it is important that they develop initiatives that go beyond the current preoccupation with access and skills and address wider inequalities in society, that are underpinned by the logics of neoliberalism. Digital access and skills matter (Eynon et al., 2018; Helsper, 2021; van Deursen & van Dijk, 2018) but they are rarely sufficient for individuals to achieve positive social outcomes. At the very least, policy strategies would need to acknowledge and account for the ways that the Internet is not a neutral tool, but a cultural and social artefact that constrain some and enable others through designs that favour certain values, classes and attitudes (Noble, 2018); and recognise the wider constraints and enablements of objective structural and cultural factors that people encounter as they, in Archer's terms 'make their way through the world' (Archer, 2007).

While not a panacea to these challenges, engaging users in participatory design initiatives and community based approaches to supporting the use of technology may be ways to move beyond the access and skills agenda (e.g. Bakardjieva & Smith, 2001; Cartier et al., 2005; Clark et al., 2004; Costanza-Chock, 2020; Eubanks, 2011; Gurstein, 2003; Kvansy and Truex, 2001; Winters et al., 2020).

Conclusion

This study has added to existing literature on the relationships between social inequality and Internet use. Though there is a growing and rich literature on the experiences of those who are digitally excluded due to issues relating to access and skills, there is far less attention on the experiences and implications for those who are using the Internet for an array of purposes but are from less well-off backgrounds. It is hoped that the focus in this paper of this under researched group, and the adoption of a critical realist approach to explaining the data may be valuable both conceptually, but also practically, in adding to the ways in which to address inequality through digital policy and practice.

In future work it would be interesting to explore how different modes of reflexivity, that are likely to have implications in terms of individuals social (im)mobility and implications for social change (Archer, 2007), relate to Internet use. It would also be valuable to better connect with important research on intersectionality and the Internet (Clegg, 2016; Noble & Tynes, 2016); and carry out more longitudinal work with each interviewee.

Nevertheless, this study has provided insights into the value of applying a critical realist lens in this field and offered alternatives to the individualised framing of digital inclusion debates where access and skills are prioritized. It has provided a conceptual framing that enables researches to recognise agency, structure and the Internet as separate conceptual entities, that add up to more than the sum of their parts – recognising social structure as something that is very much real, not a construction of people's experiences, the inequalities of which can and should be addressed.

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1. All interviewees have been pseudonymised.

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